```
Ser Gly Trp Thr Gln Ala Leu Pro Asp Met Val Val Ser His Leu Phe
        115                 120                 125

Gly Lys Glu Glu Met Gln Ser Asn Val Glu Val Val His Thr Tyr Arg
        130                 135                 140

Gln His Ile Val Asn Asp Met Asn Pro Gly Asn Leu His Leu Phe Ile
145                     150                 155                 160

Asn Ala Tyr Asn Ser Arg Arg Asp Leu Glu Ile Glu Arg Pro Met Pro
                165                 170                 175

Gly Thr His Thr Val Thr Leu Gln Cys Pro Ala Leu Leu Val Val Gly
            180                 185                 190

Asp Ser Ser Pro Ala Val Asp Ala Val Val Glu Cys Asn Ser Lys Leu
        195                 200                 205

Asp Pro Thr Lys Thr Thr Leu Leu Lys Met Ala Asp Cys Gly Gly Leu
        210                 215                 220

Pro Gln Ile Ser Gln Pro Ala Lys Leu Ala Glu Ala Phe Lys Tyr Phe
225                 230                 235                 240

Val Gln Gly Met Gly Tyr Met Pro Arg Leu Ala
                245                 250
```

```
<210> 1405
<211> 127
<212> PRT
<213> Homo sapiens

<400> 1405
Phe Glu Gly Phe Tyr Ser Gly Arg Lys Asn Arg Thr Lys Val Tyr Val
1               5               10                  15

Pro Ser Ser Val Val Leu Ile Asp Leu Phe Phe Leu Phe Glu Thr Lys
                20                  25                  30

Val Val Ser Val Phe Trp Phe Ser Gly Asn Met Tyr Tyr Ile Val Leu
            35                  40                  45

Lys Glu Cys Cys Pro Thr Asn Tyr Ser Ser Lys Gln Arg Ile Val Thr
        50                  55                  60

Ile Asn Lys Val Ser Val Thr Leu Leu Pro Leu Ser His Asn Ile His
65                  70                  75                  80

Cys Arg Ala Leu Cys Arg Ser Lys Asn Arg Ala Ala Gln Asn Leu Cys
```

1476

```
                    85             90                    95

Gly Ser Phe Leu Ser Phe Cys Asn Leu Arg His Met Phe Gln Arg Thr
            100             105                   110


Gly Ile Phe Val Trp Ser Ser Asp Leu Gly Asp His Ser His Asn
        115             120                   125
```

<210> 1406
<211> 230
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (192)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

1477

<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1406
```
Ala Glu Arg Pro Leu Gln Val Pro Arg Ser Ala Gly Glu Ala Ala Pro
 1               5                  10                 15

His Ser Arg Arg Pro Pro Gly Leu Leu Pro His Ala Pro Arg Ala Ala
            20                  25                  30

Ser Ala Gln Leu Glu Glu Arg Arg Arg Asp Pro His Pro Gly Met Thr
            35                  40                  45

Leu Gln Glu Gly Asp Cys Arg Gly Ser Gln Thr Val Ser Leu Thr Met
        50                  55                  60

Gly Thr Ala Asp Ser Asp Glu Met Ala Pro Glu Ala Pro Gln His Thr
65                  70                  75                  80

His Ile Asp Val His Ile His Gln Glu Xaa Ala Leu Ala Lys Leu Leu
                85                  90                  95

Leu Thr Cys Cys Ser Ala Leu Arg Pro Arg Ala Thr Gln Ala Arg Xaa
            100                 105                 110

Ser Ser Arg Leu Leu Xaa Ala Ser Trp Val Met Gln Ile Val Leu Gly
        115                 120                 125

Ile Leu Ser Ala Val Leu Gly Gly Phe Phe Tyr Ile Arg Asp Tyr Thr
    130                 135                 140

Leu Leu Val Thr Ser Gly Ala Ala Ser Gly Gln Gly Leu Trp Leu Cys
145                 150                 155                 160

Cys Trp Ser Cys Cys Leu His Leu Xaa Glu Thr Gly Trp Tyr Ile Leu
            165                 170                 175

Gly Pro Ala Glu Asp Ser Ala Asn Ala Gly Lys Leu Ser Xaa Gln Xaa
            180                 185                 190

Ser Xaa Ala Ser Asn Phe Gly Asn Glu Glu Phe Arg Tyr Gly Leu Leu
        195                 200                 205

Leu Ile Thr Thr Ser Gly Trp Pro Xaa Xaa Gln Val Arg Val Asp Trp
    210                 215                 220
```

Asn Thr Ser Ser Pro Gln
225   230

<210> 1407
<211> 79
<212> PRT
<213> Homo sapiens

<400> 1407
Arg Gly His Phe Leu Leu Pro Asp Leu Asp Ile Pro Ser Asn Pro Ser
 1   5   10   15

Ser Tyr Ser Met Leu Lys Glu Lys Tyr Ser Gln Met His Tyr Val Asn
            20   25   30

Gly Glu Lys Lys His Ser Ile Val Glu Thr Pro Ile Leu Ala Asn Val
        35   40   45

Phe Trp Ser Val Phe His Phe Thr Val Tyr Ile Pro Ala Leu Lys Thr
    50   55   60

Gln Gly Gln Val Leu Thr Lys Glu Val Cys Ser His Ser Lys Tyr
65   70   75

<210> 1408
<211> 289
<212> PRT
<213> Homo sapiens

<400> 1408
Val Arg Pro Pro Ser His Val Thr Ala Asp Ser Gly Arg Ser Pro Leu
 1   5   10   15

Ser Leu Thr Tyr Leu Pro Leu Gln Glu Pro Gly Asp Met Ala Ala Ala
            20   25   30

Val Pro Arg Ala Ala Phe Leu Ser Pro Leu Leu Pro Leu Leu Leu Gly
        35   40   45

Phe Leu Leu Leu Ser Ala Pro His Gly Gly Ser Gly Leu His Thr Lys
    50   55   60

Gly Ala Leu Pro Leu Asp Thr Val Thr Phe Tyr Lys Val Ile Pro Lys
65   70   75   80

Ser Lys Phe Val Leu Val Lys Phe Asp Thr Gln Tyr Pro Tyr Gly Glu

1479

```
                    85                    90                    95

    Lys Gln Asp Glu Phe Lys Arg Leu Ala Glu Asn Ser Ala Ser Ser Asp
                100                 105                 110

    Asp Leu Leu Val Ala Glu Val Gly Ile Ser Asp Tyr Gly Asp Lys Leu
                115                 120                 125

    Asn Met Glu Leu Ser Glu Lys Tyr Lys Leu Asp Lys Glu Ser Tyr Pro
                130                 135                 140

    Val Phe Tyr Leu Phe Arg Asp Gly Asp Phe Glu Asn Pro Val Pro Tyr
    145                 150                 155                 160

    Thr Gly Ala Val Lys Val Gly Ala Ile Gln Arg Trp Leu Lys Gly Gln
                165                 170                 175

    Gly Val Tyr Leu Gly Met Pro Gly Cys Leu Pro Val Tyr Asp Ala Leu
                180                 185                 190

    Ala Gly Glu Phe Ile Arg Ala Ser Gly Val Glu Ala Arg Gln Ala Leu
                195                 200                 205

    Leu Lys Gln Gly Gln Asp Asn Leu Ser Ser Val Lys Glu Thr Gln Lys
        210                 215                 220

    Lys Trp Ala Glu Gln Tyr Leu Lys Ile Met Gly Lys Ile Leu Asp Gln
    225                 230                 235                 240

    Gly Glu Asp Phe Pro Ala Ser Glu Met Thr Arg Ile Ala Arg Leu Ile
                245                 250                 255

    Glu Lys Asn Lys Met Ser Asp Gly Lys Lys Glu Glu Leu Gln Lys Ser
                260                 265                 270

    Leu Asn Ile Leu Thr Ala Phe Gln Lys Lys Gly Ala Glu Lys Glu Glu
                275                 280                 285

    Leu
```

<210> 1409
<211> 488
<212> PRT
<213> Homo sapiens

<400> 1409
```
    Pro Ala Ser Ala Gly Thr Val Ser Glu Gly Pro Pro Gly Thr Asp Gly
     1               5                  10                  15
```

1480

```
Ser Ala Gly Arg Gly Gly Thr Ala Phe Ala Met Ala Ala Thr Val Asn
          20              25              30

Leu Glu Leu Asp Pro Ile Phe Leu Lys Ala Leu Gly Phe Leu His Ser
          35              40              45

Lys Ser Lys Asp Ser Ala Glu Lys Leu Lys Ala Leu Leu Asp Glu Ser
    50              55              60

Leu Ala Arg Gly Ile Asp Ser Ser Tyr Arg Pro Ser Gln Lys Asp Val
65              70              75 .            80

Glu Pro Pro Lys Ile Ser Ser Thr Lys Asn Ile Ser Ile Lys Gln Glu
              85              90              95

Pro Lys Ile Ser Ser Ser Leu Pro Ser Gly Asn Asn Asn Gly Lys Val
          100             105             110

Leu Thr Thr Glu Lys Val Lys Lys Glu Ala Glu Lys Arg Pro Ala Asp
          115             120             125

Lys Met Lys Ser Asp Ile Thr Glu Gly Val Asp Ile Pro Lys Lys Pro
    130             135             140

Arg Leu Glu Lys Pro Glu Thr Gln Ser Ser Pro Ile Thr Val Gln Ser
145             150             155             160

Ser Lys Asp Leu Pro Met Ala Asp Leu Ser Ser Phe Glu Glu Thr Ser
              165             170             175

Ala Asp Asp Phe Ala Met Glu Met Gly Leu Ala Cys Val Val Cys Arg
              180             185             190

Gln Met Met Val Ala Ser Gly Asn Gln Leu Val Glu Cys Gln Glu Cys
          195             200             205

His Asn Leu Tyr His Arg Asp Cys His Lys Pro Gln Val Thr Asp Lys
    210             215             220

Glu Ala Asn Asp Pro Arg Leu Val Trp Tyr Cys Ala Arg Cys Thr Arg
225             230             235             240

Gln Met Lys Arg Met Ala Gln Lys Thr Gln Lys Pro Pro Gln Lys Pro
              245             250             255

Ala Pro Ala Val Val Ser Val Thr Pro Ala Val Lys Asp Pro Leu Val
              260             265             270

Lys Lys Pro Glu Thr Lys Leu Lys Gln Glu Thr Thr Phe Leu Ala Phe
          275             280             285
```

1481

```
Lys Arg Thr Glu Val Lys Thr Ser Thr Val Ile Ser Gly Asn Ser Ser
    290                 295             300

Ser Ala Ser Val Ser Ser Ser Val Thr Ser Gly Leu Thr Gly Trp Ala
305                 310             315                 320

Ala Phe Ala Ala Lys Thr Ser Ser Ala Gly Pro Ser Thr Ala Lys Leu
                325             330                 335

Ser Ser Thr Thr Gln Asn Asn Thr Gly Lys Pro Ala Thr Ser Ser Ala
            340             345         .       350

Asn Gln Lys Pro Val Gly Leu Thr Gly Leu Ala Thr Ser Ser Lys Gly
        355             360             365

Gly Ile Gly Ser Lys Ile Gly Ser Asn Asn Ser Thr Thr Pro Thr Val
   370             375             380

Pro Leu Lys Pro Pro Pro Pro Leu Thr Leu Gly Lys Thr Gly Leu Ser
385             390             395                 400

Arg Ser Val Ser Cys Asp Asn Val Ser Lys Val Gly Leu Pro Ser Pro
            405             410             415

Ser Ser Leu Val Pro Gly Ser Ser Ser Gln Leu Ser Gly Asn Gly Asn
            420             425             430

Ser Gly Thr Ser Gly Pro Ser Gly Ser Thr Thr Ser Lys Thr Thr Ser
        435             440             445

Glu Ser Ser Ser Ser Pro Ser Ala Ser Leu Lys Gly Pro Thr Ser Gln
    450             455             460

Glu Ser Gln Leu Asn Ala Met Lys Arg Leu Gln Met Val Lys Lys Lys
465             470             475                 480

Ala Ala Gln Lys Lys Leu Lys Lys
            485
```

```
<210> 1410
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1410
His Tyr Gly Leu Lys Leu Ala Val Lys Met Pro Asn Thr Val Val Pro
 1   5   10   15

Trp Asn Pro Val Tyr Ser Cys Ala Lys Gln Asn Cys Lys Ile Val Lys
                20   25   30

Met Ser Tyr Gln Val Ile Arg Arg Leu Gln Arg His His Leu Phe Phe
            35   40   45

Ile Ser Phe Phe Xaa Leu Thr His Val Val Val Ile Phe Asn Thr Phe
            50   55   60

<210> 1411
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1411
Ala Ala Cys Leu Ala Leu Arg Ile Ala Ala Ala Met Ala Ser Gln Ser
 1   5   10   15

Gln Gly Ile Gln Gln Leu Leu Gln Ala Glu Lys Arg Ala Ala Glu Lys
                20   25   30

Val Ser Glu Ala Arg Lys Arg Lys Asn Arg Arg Leu Lys Gln Ala Lys
            35   40   45

Glu Glu Ala Gln Ala Glu Ile Glu Gln Tyr Arg Leu Gln Arg Glu Lys
            50   55   60

Glu Phe Lys Ala Lys Glu Ala Ala Ala Leu Gly Ser Arg Gly Ser Cys
65   70   75   80

Ser Thr Glu Val Glu Lys Glu Thr Gln Glu Lys Met Thr Ile Leu Gln
                85   90   95

Thr Tyr Phe Arg Gln Asn Arg Asp Glu Val Leu Asp Asn Leu Leu Ala
            100   105   110

Phe Val Cys Asp Ile Arg Pro Glu Ile His Glu Asn Tyr Arg Ile Asn
            115   120   125

Gly

1483

<210> 1412
<211> 177
<212> PRT
<213> Homo sapiens

<400> 1412
Val Thr Val Pro Ser Ser Ser Ala Ala Gly Thr Leu Phe Gln Gly Leu
 1   5   10   15

Cys Gly Ala Pro Asp Ala Pro His Pro Leu Ser Lys Ile Pro Gly Gly
            20   25   30

Arg Gly Gly Gly Arg Asp Pro Ser Leu Ser Ala Leu Ile Tyr Lys Asp
        35   40   45

Glu Lys Leu Thr Val Thr Gln Asp Leu Pro Val Asn Asp Gly Lys Pro
    50   55   60

His Ile Val His Phe Gln Tyr Glu Val Thr Glu Val Lys Val Ser Ser
65   70   75   80

Trp Asp Ala Val Leu Ser Ser Gln Ser Leu Phe Val Glu Ile Pro Asp
            85   90   95

Gly Leu Leu Ala Asp Gly Ser Lys Glu Gly Leu Leu Ala Leu Leu Glu
            100   105   110

Phe Ala Glu Glu Lys Met Lys Val Asn Tyr Val Phe Ile Cys Phe Arg
        115   120   125

Lys Gly Arg Glu Asp Arg Ala Pro Leu Leu Lys Thr Phe Ser Phe Leu
    130   135   140

Gly Phe Glu Ile Val Arg Pro Gly His Pro Cys Val Pro Ser Arg Pro
145   150   155   160

Asp Val Met Phe Met Val Tyr Pro Leu Asp Gln Asn Leu Ser Asp Glu
                165   170   175

Asp

<210> 1413
<211> 112
<212> PRT
<213> Homo sapiens

<400> 1413
Ser Gly Leu Arg Leu Ala Met Ser Thr Asn Asn Met Ser Asp Pro Arg
 1   5   10   15

Arg Pro Asn Lys Val Leu Arg Tyr Lys Pro Pro Pro Ser Glu Cys Asn
              20   25   30

Pro Ala Leu Asp Asp Pro Thr Pro Asp Tyr Met Asn Leu Leu Gly Met
          35   40   45

Ile Phe Ser Met Cys Gly Leu Met Leu Lys Leu Lys Trp Cys Ala Trp
       50   55   60

Val Ala Val Tyr Cys Ser Phe Ile Ser Phe Ala Asn Ser Arg Ser Ser
65   70   75   80

Glu Asp Thr Lys Gln Met Met Ser Ser Phe Met Leu Ser Ile Ser Ala
              85   90   95

Val Val Met Ser Tyr Leu Gln Asn Pro Gln Pro Met Thr Pro Pro Trp
              100   105   110

<210> 1414
<211> 186
<212> PRT
<213> Homo sapiens

<400> 1414
Cys Leu Gly Gly Arg Pro Arg Cys Val Leu Arg Leu Thr Ala Asn Leu
 1   5   10   15

Glu Gly Arg Arg Asp Ser Ala Thr His Ala Pro Pro His Pro Arg Leu
              20   25   30

Arg Val Lys Arg Ala Val Gly Pro Glu Ser Pro Pro Leu Trp Gln Trp
              35   40   45

Pro Pro Leu Tyr Ser Ile Leu Pro Ser Gly Arg Ser Ala Val Asn Lys
          50   55   60

Arg Trp Ala Pro Gln Ser Thr Cys Pro Pro Thr Ala Leu Ala Val Leu
65   70   75   80

Gly Ser Ser Leu Gln Phe Thr Gly Asn Lys Pro Glu Ser Ala Arg Thr
              85   90   95

```
Arg Gly Cys Ser Pro Gly Ser Ala Arg Pro Pro Leu Ser Pro Ala Thr
            100             105             110

Gly Trp Arg Cys Arg Ala Arg Ala Ala Ala Ser Arg Arg Phe Pro Gly
        115             120             125

Ala Pro Gly Pro Glu Glu Arg Ser Pro Gln Ser Lys Gly Gly Asn Thr
    130             135             140

Cys Leu Arg Cys Lys Glu Ile Leu Phe Gln Ser Ile Pro Val Val Gln
145             150             155             160

Thr Asp Thr Val Pro Asn Glu Arg Ser Asp Val Phe Ser Ser Pro Phe
            165             170             175

Leu Ile Cys Phe Leu Thr Gly Leu Arg Phe
            180             185
```

<210> 1415
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1415
```
Thr Lys Thr Thr Leu Phe Leu Glu Arg Pro Leu Phe Lys Lys Glu Ser
  1             5               10              15

Ile Thr Pro Thr Val Glu Leu Asn Ala Leu Cys Met Lys Leu Gly Lys
            20              25              30

Lys Pro Met Tyr Lys Pro Val Asp Pro Tyr Ser Arg Met Xaa Ser Thr
        35              40              45

Tyr Asn Tyr Asn Met Arg Gly Gly Ala Tyr Pro Pro Arg Tyr Phe Tyr
    50              55              60

Pro Phe Pro Xaa Pro Pro Leu Leu Tyr Gln Val Glu Leu Ser Val Gly
65              70              75              80
```

1486

Gly Gln Gln Phe Asn Gly Lys Gly Lys Thr Arg Gln Ala Ala Lys His
                85   90   95

Asp Ala Ala Ala Lys Ala Val Glu Asp Pro Ala Glu
            100   105

<210> 1416
<211> 621
<212> PRT
<213> Homo sapiens

<400> 1416
Ala Gly His Arg Ala Gly Val Cys Ser Leu Ser Ala Thr Arg Leu Leu
 1   5   10   15

Leu Pro Lys Asp Arg Gly Val Gly Arg Arg Gln Thr Met Trp Thr Leu
            20   25   30

Val Ser Trp Val Ala Leu Thr Ala Gly Leu Val Ala Gly Thr Arg Cys
        35   40   45

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
    50   55   60

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
65   70   75   80

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
            85   90   95

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
            100   105   110

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
    115   120   125

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
    130   135   140

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
145   150   155   160

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
            165   170   175

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
            180   185   190

1487

```
Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
        195             200             205

Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala Gln Arg Thr
    210             215             220

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
225             230             235             240

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
            245             250             255

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
            260             265             270

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
    275             280             285

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
    290             295             300

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
305             310             315             320

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
            325             330             335

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
            340             345             350

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
            355             360             365

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
    370             375             380

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
385             390             395             400

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
            405             410             415

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
            420             425             430

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
    435             440             445

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
    450             455             460
```

1488

```
Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
465                 470             475                 480

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
                485                 490                 495

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
                500                 505                 510

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
        515                 520                 525

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
        530                 535                 540

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
545                 550                 555                 560

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
                565                 570                 575

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
        580                 585                 590

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
        595                 600                 605

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
    610                 615                 620
```

<210> 1417
<211> 340
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1417
```
Ser Ala His Ala Ser Glu Arg Ile Ala Xaa Ser Gly Cys Gly Ala Pro
    1               5                   10                  15
```

1489

```
Ala Ala Gly Ala Gly Pro Arg Xaa Arg Ser Leu Gly Ala Asp Pro Gly
            20              25                  30

Arg Ala Ala Arg Arg His Glu Gly Gln Gly Gly Glu Gly Gly Arg Arg
            35              40                  45

Thr Ala Gly Arg Trp Arg Arg Lys Pro Glu Lys Ser Pro Ser Ala Gln
    50              55                  60

Glu Leu Lys Glu Gln Gly Asn Arg Leu Phe Val Gly Arg Lys Tyr Pro
65              70                  75                  80

Glu Ala Ala Ala Cys Tyr Gly Arg Ala Ile Thr Arg Asn Pro Leu Val
            85                  90                  95

Ala Val Tyr Tyr Thr Asn Arg Ala Leu Cys Tyr Leu Lys Met Gln Gln
            100             105                 110

His Glu Gln Ala Leu Ala Asp Cys Arg Arg Ala Leu Glu Leu Asp Gly
            115                 120                 125

Gln Ser Val Lys Ala His Phe Phe Leu Gly Gln Cys Gln Leu Glu Met
    130                 135                 140

Glu Ser Tyr Asp Glu Ala Ile Ala Asn Leu Gln Arg Ala Tyr Ser Leu
145                 150                 155                 160

Ala Lys Glu Gln Arg Leu Asn Phe Gly Asp Asp Ile Pro Ser Ala Leu
            165                 170                 175

Arg Ile Ala Lys Lys Lys Arg Trp Asn Ser Ile Glu Glu Arg Arg Ile
            180                 185                 190

His Gln Glu Ser Glu Leu His Ser Tyr Leu Ser Arg Leu Ile Ala Ala
    195                 200                 205

Glu Arg Glu Arg Glu Leu Glu Glu Cys Gln Arg Asn His Glu Gly Asp
    210                 215                 220

Glu Asp Asp Ser His Val Arg Ala Gln Gln Ala Cys Ile Glu Ala Lys
225                 230                 235                 240

His Asp Lys Tyr Met Ala Asp Met Asp Glu Leu Phe Ser Gln Val Asp
            245                 250                 255

Glu Lys Arg Lys Lys Arg Asp Ile Pro Asp Tyr Leu Cys Gly Lys Ile
            260                 265                 270

Ser Phe Glu Leu Met Arg Glu Pro Cys Ile Thr Pro Ser Gly Ile Thr
    275                 280                 285
```

```
Tyr Asp Arg Lys Asp Ile Glu Glu His Leu Gln Arg Val Gly His Phe
    290             295             300

Asp Pro Val Thr Arg Ser Pro Leu Thr Gln Glu Gln Leu Ile Pro Asn
305             310             315             320

Leu Ala Met Lys Glu Val Ile Asp Ala Phe Ile Ser Glu Asn Gly Trp
            325             330             335

Val Glu Asp Tyr
            340
```

<210> 1418
<211> 235
<212> PRT
<213> Homo sapiens

<400> 1418
```
Ser Pro Arg Pro Leu Arg Phe Cys Gly Gly Ala Arg Ala Arg Arg Pro
  1             5             10             15

Leu Ser Ala Val Ala Arg Pro Ala Arg Ser Ser Asp Pro Leu Arg Ser
            20             25             30

Ala Pro Leu Gly Pro Ala Pro Pro Val Asn Met Ile Arg Cys Gly Leu
            35             40             45

Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro Leu Leu Leu Leu Ser Ala
     50             55             60

Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly Arg Gly Trp Leu Gln Ser
 65             70             75             80

Ser Asp His Gly Gln Thr Ser Ser Leu Trp Trp Lys Cys Ser Gln Glu
            85             90             95

Gly Gly Gly Ser Gly Ser Tyr Glu Glu Gly Cys Gln Ser Leu Met Glu
            100             105             110

Tyr Ala Trp Gly Arg Ala Ala Ala Ala Met Leu Phe Cys Gly Phe Ile
            115             120             125

Ile Leu Val Ile Cys Phe Ile Leu Ser Phe Phe Ala Leu Cys Gly Pro
            130             135             140

Gln Met Leu Val Phe Leu Arg Val Ile Gly Gly Leu Leu Ala Leu Ala
145             150             155             160

Ala Val Phe Gln Ile Ile Ser Leu Val Ile Tyr Pro Val Lys Tyr Thr
```

1491

                165   170   175

Gln Thr Phe Thr Leu His Ala Asn Arg Ala Val Thr Tyr Ile Tyr Asn
            180   185   190

Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr Ile Ile Leu Ile Gly Cys
            195   200   205

Ala Phe Phe Phe Cys Cys Leu Pro Asn Tyr Glu Asp Asp Leu Leu Gly
    210   215   220

Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser Ala
225   230   235

<210> 1419
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1419
Arg Arg Gln Ala Leu Gln Glu Arg Cys Pro Phe Asn Pro Leu Ser Ala
    1   5   10   15

Leu Asp Arg Arg Cys Cys Val Lys Leu Leu Met Asp Ile Tyr Met Arg
            20   25   30

Ser Ser Phe Leu Tyr Ala Ile Pro Ala Val Phe Phe Phe Leu Thr Gly
            35   40   45

Pro Cys Leu Arg Ile Asn Lys Ser Val Met Ser Glu Thr Lys Val Tyr
    50   55   60

Ser Ser Val Cys Arg Cys Val Ala Pro Pro Phe Ser Pro Ala Ala Pro
65   70   75   80

His Ile Gln Ser Arg Ser
                85

<210> 1420
<211> 351
<212> PRT
<213> Homo sapiens

<400> 1420
Thr Trp Cys Thr Thr Thr Met Leu Ala Ala Arg Leu Val Cys Leu Arg
    1   5   10   15

1492

```
Thr Leu Pro Ser Arg Val Phe His Pro Ala Phe Thr Lys Ala Ser Pro
            20                  25                  30

Val Val Lys Asn Ser Ile Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser
            35                  40                  45

Arg Glu Tyr Ala Thr Lys Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr
    50                  55                  60

Gly Gln Glu Leu Lys Glu Ala Ala Leu Glu Pro Ser Met Glu Lys Ile
65                  70                  75                  80

Phe Lys Ile Asp Gln Met Gly Arg Trp Phe Val Ala Gly Gly Ala Ala
                85                  90                  95

Val Gly Leu Gly Ala Leu Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu
            100                 105                 110

Ile Gly Ala Ile Glu Lys Ala Val Ile Trp Pro Gln Tyr Val Lys Asp
            115                 120                 125

Arg Ile His Ser Thr Tyr Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr
    130                 135                 140

Ala Leu Ser Ala Ile Ala Ile Ser Arg Thr Pro Val Leu Met Asn Phe
145                 150                 155                 160

Met Met Arg Gly Ser Trp Val Thr Ile Gly Val Thr Phe Ala Ala Met
            165                 170                 175

Val Gly Ala Gly Met Leu Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro
            180                 185                 190

Gly Pro Lys His Leu Ala Trp Leu Leu His Ser Gly Val Met Gly Ala
            195                 200                 205

Val Val Ala Pro Leu Thr Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala
    210                 215                 220

Ala Trp Tyr Thr Ala Gly Ile Val Gly Gly Leu Ser Thr Val Ala Met
225                 230                 235                 240

Cys Ala Pro Ser Glu Lys Phe Leu Asn Met Gly Ala Pro Leu Gly Val
            245                 250                 255

Gly Leu Gly Leu Val Phe Val Ser Ser Leu Gly Ser Met Phe Leu Pro
            260                 265                 270

Pro Thr Thr Val Ala Gly Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly
    275                 280                 285
```

```
Gly Leu Val Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val
    290             295             300

Ile Lys Arg Ala Glu Val Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp
305             310             315             320

Pro Ile Asn Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe
            325             330             335

Met Arg Val Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys Lys
            340             345             350
```

<210> 1421
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1421
```
Cys Gly Xaa Leu Leu Met Ala Gln Gly Leu Ser Ala Ser Ala Leu Glu
  1             5              10              15

Gly Leu Lys Thr Glu Glu Gly Ser Val Arg Gly Ala Leu Pro Ala Val
            20              25              30

Ser Ser Pro Pro Ala Pro Val Ser Pro Ser Ser Pro Thr Thr His Asn
            35              40              45

Gly Glu Leu Glu Pro Ser Phe Ser Pro Leu Leu Gly Glu Gly Lys Thr
    50              55              60

Pro Glu Thr Leu Leu Pro Gln Lys Cys Trp Gly Gln Gly Gly Pro Gly
65              70              75              80

Arg
```

<210> 1422
<211> 484
<212> PRT
<213> Homo sapiens

<400> 1422

1494

```
Ala Cys Arg Ser Thr Leu Val Asp Pro Lys Asn Ser Ala Gln Glu Arg
 1           5               10              15

Arg Ala Leu Gly Pro Leu Pro Pro Cys Ser Phe Ala Leu Gln Leu Gly
            20          25              30

Met Ala Gly Tyr Leu Arg Val Val Arg Ser Leu Cys Arg Ala Ser Gly
            35              40              45

Ser Arg Pro Ala Trp Ala Pro Ala Ala Leu Thr Ala Pro Thr Ser Gln
        50              55              60

Glu Gln Pro Arg Arg His Tyr Ala Asp Lys Arg Ile Lys Val Ala Lys
65              70              75              80

Pro Val Val Glu Met Asp Gly Asp Glu Met Thr Arg Ile Ile Trp Gln
                85              90              95

Phe Ile Lys Glu Lys Leu Ile Leu Pro His Val Asp Ile Gln Leu Lys
            100             105             110

Tyr Phe Asp Leu Gly Leu Pro Asn Arg Asp Gln Thr Asp Asp Gln Val
        115             120             125

Thr Ile Asp Ser Ala Leu Ala Thr Gln Lys Tyr Ser Val Ala Val Lys
    130             135             140

Cys Ala Thr Ile Thr Pro Asp Glu Ala Arg Val Glu Glu Phe Lys Leu
145             150             155             160

Lys Lys Met Trp Lys Ser Pro Asn Gly Thr Ile Arg Asn Ile Leu Gly
            165             170             175

Gly Thr Val Phe Arg Glu Pro Ile Ile Cys Lys Asn Ile Pro Arg Leu
            180             185             190

Val Pro Gly Trp Thr Lys Pro Ile Thr Ile Gly Arg His Ala His Gly
        195             200             205

Asp Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg Ala Gly Thr Phe
    210             215             220

Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val Lys Glu Trp Glu
225             230             235             240

Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly Met Tyr Asn Thr
            245             250             255

Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe Gln Tyr Ala Ile
        260             265             270
```

```
Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr Ile Leu Lys
        275             280             285

Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile Phe Asp Lys
    290             295             300

His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg
305             310             315             320

Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe
            325             330             335

Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu
            340             345             350

Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys
        355             360             365

Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr
    370             375             380

Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro
385             390             395             400

Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys
            405             410             415

Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys
        420             425             430

Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala
        435             440             445

Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu
    450             455             460

Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala
465             470             475             480

Leu Gly Arg Gln
```

```
<210> 1423
<211> 240
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1423
Val Arg Ile Pro Gly Ser Thr His Ala Ser Gly Gly Gly Asp Gly Asp
 1   5   10   15

Met Glu Ser Gly Ala Tyr Gly Ala Ala Lys Ala Gly Gly Ser Phe Asp
            20   25   30

Leu Arg Arg Phe Leu Thr Gln Pro Gln Val Val Ala Arg Ala Val Cys
        35   40   45

Leu Val Phe Ala Leu Ile Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr
    50   55   60

Ser Asn Ala His Glu Ser Lys Gln Met Tyr Cys Val Phe Asn Arg Asn
65   70   75   80

Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala Phe Leu
            85   90   95

Ala Ser Ala Phe Phe Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser
            100   105   110

Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile Gly Asp Leu Leu Phe Ser
            115   120   125

Ala Leu Trp Thr Phe Leu Trp Phe Val Gly Phe Cys Phe Leu Thr Asn
    130   135   140

Gln Trp Ala Val Thr Asn Pro Lys Xaa Val Leu Val Gly Ala Asp Ser
145   150   155   160

Val Arg Ala Ala Ile Thr Phe Ser Phe Phe Ser Ile Phe Ser Trp Gly
            165   170   175

Val Leu Ala Ser Leu Ala Tyr Gln Arg Tyr Lys Ala Gly Val Asp Asp
            180   185   190

Phe Ile Gln Asn Tyr Val Asp Pro Thr Pro Asp Pro Asn Thr Ala Tyr
        195   200   205

Ala Ser Tyr Pro Gly Ala Ser Val Asp Asn Tyr Gln Gln Pro Pro Phe
    210   215   220

Thr Gln Asn Ala Glu Thr Thr Glu Gly Tyr Gln Pro Pro Pro Val Tyr
225   230   235   240

<210> 1424
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1424
Arg Val Arg Arg Gln Ser Ser Gly Asn Leu Thr Met Ala Trp Thr Pro
 1   5   10   15

Leu Leu Leu Pro Leu Leu Thr Phe Cys Thr Val Ser Glu Ala Ser Tyr
             20   25   30

Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala
         35   40   45

Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Xaa Lys Tyr Xaa Tyr Trp
     50   55   60

Tyr Gln Gln Lys Ser Gly Gln Ala Pro Val Leu Val Ile Tyr Glu Asp
 65   70   75   80

Thr Arg Arg Pro Ser Ala Ile Pro Glu Arg Phe Ser Ala Ser Ser Ser
                 85   90   95

Gly Thr Met Ala Thr Leu Thr Ile Ser Gly Ala Gln Val Glu Asp Glu
             100   105   110

Ala Asp Tyr Tyr Cys Tyr Ser Thr Asp Ser Ser Ser Tyr Tyr Arg Val
             115   120   125

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys Ala Ala
         130   135   140

```
Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln Ala Asn
145                 150             155                     160

Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly Ala Val
                165             170                 175

Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly Val Glu
            180             185             190

Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala Ser Ser
        195             200             205

Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Xaa Ser Tyr Ser
    210             215             220

Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys Thr Val Ala Pro
225             230             235                     240

Thr Glu Cys Ser
```

<210> 1425
<211> 173
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (159)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1425
```
Xaa Val Arg Val Gln Thr Arg Gly Ser Ala Asp Pro Ala Gln Leu Arg
 1               5                  10                  15

Arg His Pro Gly Tyr Lys Arg Thr Ala Ser Ala Thr Leu Ser Asp Pro
            20                  25                  30

Ala Ala Ala Ala Met Gln Pro Ser Ser Leu Leu Pro Leu Ala Leu Cys
        35                  40                  45

Leu Leu Ala Ala Pro Ala Ser Ala Leu Val Arg Ile Pro Leu His Lys
    50                  55                  60

Phe Thr Ser Ile Arg Arg Thr Met Ser Glu Val Gly Gly Ser Val Glu
65                  70                  75                  80

Asp Leu Ile Ala Lys Gly Pro Val Ser Lys Tyr Ser Gln Ala Val Pro
            85                  90                  95

Ala Val Thr Glu Gly Pro Ile Pro Glu Val Leu Lys Asn Tyr Met Asp
            100                 105                 110

Ala Gln Xaa Tyr Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe
            115                 120                 125

Thr Val Val Phe Asp Thr Gly Xaa Xaa Asn Leu Trp Val Pro Ser Ile
    130                 135                 140

His Cys Lys Leu Leu Asp Ile Ala Cys Trp Ile His His Lys Xaa Asn
145                 150                 155                 160

Ser Asp Lys Ser Ser Asn Tyr Val Lys Asn Gly Asn Ser
            165                 170
```

<210> 1426
<211> 351
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1426
```
Ile Arg His Glu Ile Leu Trp Leu Leu Cys Ser His Arg Pro Ala Pro
 1               5                  10                  15
```

1500

```
Gly Arg Pro Pro Thr His Asn Ala His Asn Trp Arg Leu Gly Gln Ala
        20              25              30

Pro Ala Xaa Trp Tyr Asn Asp Thr Tyr Pro Leu Ser Pro Pro Gln Arg
        35              40              45

Thr Pro Ala Gly Ile Arg Tyr Arg Ile Ala Val Ile Ala Asp Leu Asp
    50              55              60

Thr Glu Ser Arg Ala Gln Glu Glu Asn Thr Trp Phe Ser Tyr Leu Lys
65              70              75              80

Lys Gly Tyr Leu Thr Leu Ser Asp Ser Gly Asp Lys Val Ala Val Glu
                85              90              95

Trp Asp Lys Asp His Gly Val Leu Glu Ser His Leu Ala Glu Lys Gly
            100             105             110

Arg Gly Met Glu Leu Ser Asp Leu Ile Val Phe Asn Gly Lys Leu Tyr
        115             120             125

Ser Val Asp Asp Arg Thr Gly Val Val Tyr Gln Ile Glu Gly Ser Lys
    130             135             140

Ala Val Pro Trp Val Ile Leu Ser Asp Gly Asp Gly Thr Val Glu Lys
145             150             155             160

Gly Phe Lys Ala Glu Trp Leu Ala Val Lys Asp Glu Arg Leu Tyr Val
            165             170             175

Gly Gly Leu Gly Lys Glu Trp Thr Thr Thr Thr Gly Asp Val Val Asn
            180             185             190

Glu Asn Pro Glu Trp Val Lys Val Val Gly Tyr Lys Gly Ser Val Asp
        195             200             205

His Glu Asn Trp Val Ser Asn Tyr Asn Ala Leu Arg Ala Ala Ala Gly
    210             215             220

Ile Gln Pro Pro Gly Tyr Leu Ile His Glu Ser Ala Cys Trp Ser Asp
225             230             235             240

Thr Leu Gln Arg Trp Phe Phe Leu Pro Arg Arg Ala Ser Gln Glu Arg
            245             250             255

Tyr Ser Glu Lys Asp Asp Glu Arg Lys Gly Ala Asn Leu Leu Leu Ser
            260             265             270

Ala Ser Pro Asp Phe Gly Asp Ile Ala Val Ser His Val Gly Ala Val
        275             280             285
```

```
Val Pro Thr His Gly Phe Ser Ser Phe Lys Phe Ile Pro Asn Thr Asp
    290             295             300

Asp Gln Ile Ile Val Ala Leu Lys Ser Glu Glu Asp Ser Gly Arg Val
305             310             315             320

Ala Ser Tyr Ile Met Ala Phe Thr Leu Asp Gly Arg Phe Leu Leu Pro
            325             330             335

Glu Thr Lys Ile Gly Ser Val Lys Tyr Glu Gly Ile Glu Phe Ile
            340             345             350
```

```
<210> 1427
<211> 510
<212> PRT
<213> Homo sapiens

<400> 1427
Glu Arg Ser Trp Phe Ala Gln Val Arg Arg Leu Gly Pro His Gly Ala
  1             5             10             15

Val Ala Arg Leu Arg Val Arg Gly Leu Pro Gly Ala Gly Arg Gly Leu
            20             25             30

Arg Leu Pro Ala Gly Ala Arg Ala Ala Arg Leu Gly Ala Ala Leu Ser
            35             40             45

Leu Glu Leu Ala Val Ser Gly Ala Arg Ala Cys Ala Pro Gly Thr Arg
      50             55             60

Leu Pro Arg Gly Pro Val Gly Gly Ser Trp Asp Ala Leu Ile Val Arg
 65             70             75             80

Pro Val Arg Arg Trp Arg Arg Val Ala Val Gly Val Asn Ala Cys Val
                85             90             95

Asp Val Val Leu Ser Gly Val Lys Leu Leu Gln Ala Leu Gly Leu Ser
            100             105             110

Pro Gly Asn Gly Lys Asp His Ser Ile Leu His Ser Arg Asn Asp Leu
            115             120             125

Glu Glu Ala Phe Ile His Phe Met Gly Lys Gly Ala Ala Ala Glu Arg
      130             135             140

Phe Phe Ser Asp Lys Glu Thr Phe His Asp Ile Ala Gln Val Ala Ser
145             150             155             160
```

1502

```
Glu Phe Pro Gly Ala Gln His Tyr Val Gly Gly Asn Ala Ala Leu Ile
            165                 170             175

Gly Gln Lys Phe Ala Ala Asn Ser Asp Leu Lys Val Leu Leu Cys Gly
            180                 185             190

Pro Val Gly Pro Lys Leu His Glu Leu Leu Asp Asp Asn Val Phe Val
            195                 200             205

Pro Pro Glu Ser Leu Gln Glu Val Asp Glu Phe His Leu Ile Leu Glu
    210                 215             220

Tyr Gln Ala Gly Glu Glu Trp Gly Gln Leu Lys Ala Pro His Ala Asn
225             230                 235                 240

Arg Phe Ile Phe Ser His Asp Leu Ser Asn Gly Ala Met Asn Met Leu
            245                 250             255

Glu Val Phe Val Ser Ser Leu Glu Glu Phe Gln Pro Asp Leu Val Val
            260                 265             270

Leu Ser Gly Leu His Met Met Glu Gly Gln Ser Lys Glu Leu Gln Arg
            275                 280             285

Lys Arg Leu Leu Glu Val Val Thr Ser Ile Ser Asp Ile Pro Thr Gly
    290                 295             300

Ile Pro Val His Leu Glu Leu Ala Ser Met Thr Asn Arg Glu Leu Met
305             310                 315                 320

Ser Ser Ile Val His Gln Gln Val Phe Pro Ala Val Thr Ser Leu Gly
            325                 330             335

Leu Asn Glu Gln Glu Leu Leu Phe Leu Thr Gln Ser Ala Ser Gly Pro
            340                 345             350

His Ser Ser Leu Ser Ser Trp Asn Gly Val Pro Asp Val Gly Met Val
            355                 360             365

Ser Asp Ile Leu Phe Trp Ile Leu Lys Glu His Gly Arg Ser Lys Ser
    370                 375             380

Arg Ala Ser Asp Leu Thr Arg Ile His Phe His Thr Leu Val Tyr His
385                 390                 395                 400

Ile Leu Ala Thr Val Asp Gly His Trp Ala Asn Gln Leu Ala Ala Val
            405                 410             415

Ala Ala Gly Ala Arg Val Ala Gly Thr Gln Ala Cys Ala Thr Glu Thr
            420                 425             430
```

1503

```
Ile Asp Thr Ser Arg Val Ser Leu Arg Ala Pro Gln Glu Phe Met Thr
        435             440             445

Ser His Ser Glu Ala Gly Ser Arg Ile Val Leu Asn Pro Asn Lys Pro
    450             455             460

Val Val Glu Trp His Arg Glu Gly Ile Ser Phe His Phe Thr Pro Val
465             470             475             480

Leu Val Cys Lys Asp Pro Ile Arg Thr Val Gly Leu Gly Asp Ala Ile
            485             490             495

Ser Ala Glu Gly Leu Phe Tyr Ser Glu Val His Pro His Tyr
        500             505             510
```

<210> 1428
<211> 316
<212> PRT
<213> Homo sapiens

<400> 1428
```
Pro Pro Leu Pro Pro Arg Ser Phe Pro Asn Leu Phe Ser Arg Pro Glu
  1             5             10             15

Pro Leu Pro Glu Pro Gly Arg Arg Gly Cys Asn Arg Ser Arg Glu Pro
            20             25             30

Ala Ala Arg Ala Pro Ser Pro Pro Pro Phe Glu Gly Ala Pro Gly
        35             40             45

Arg Ala Met Val Lys Val Thr Phe Asn Ser Ala Leu Ala Gln Lys Glu
    50             55             60

Ala Lys Lys Asp Glu Pro Lys Ser Gly Glu Glu Ala Leu Ile Ile Pro
65             70             75             80

Pro Asp Ala Val Ala Val Asp Cys Lys Asp Pro Asp Asp Val Val Pro
            85             90             95

Val Gly Gln Arg Arg Ala Trp Cys Trp Cys Met Cys Phe Gly Leu Ala
            100             105             110

Phe Met Leu Ala Gly Val Ile Leu Gly Gly Ala Tyr Leu Tyr Lys Tyr
        115             120             125

Phe Ala Leu Gln Pro Asp Asp Val Tyr Tyr Cys Gly Ile Lys Tyr Ile
        130             135             140

Lys Asp Asp Val Ile Leu Asn Glu Pro Ser Ala Asp Ala Pro Ala Ala
```

1504

145   150   155   160

Leu Tyr Gln Thr Ile Glu Glu Asn Ile Lys Ile Phe Glu Glu Glu
            165   170   175

Val Glu Phe Ile Ser Val Pro Val Pro Glu Phe Ala Asp Ser Asp Pro
            180   185   190

Ala Asn Ile Val His Asp Phe Asn Lys Lys Leu Thr Ala Tyr Leu Asp
            195   200   205

Leu Asn Leu Asp Lys Cys Tyr Val Ile Pro Leu Asn Thr Ser Ile Val
    210   215   220

Met Pro Pro Arg Asn Leu Leu Glu Leu Leu Ile Asn Ile Lys Ala Gly
225   230   235   240

Thr Tyr Leu Pro Gln Ser Tyr Leu Ile His Glu His Met Val Ile Thr
            245   250   255

Asp Arg Ile Glu Asn Ile Asp His Leu Gly Phe Phe Ile Tyr Arg Leu
            260   265   270

Cys His Asp Lys Glu Thr Tyr Lys Leu Gln Arg Arg Glu Thr Ile Lys
            275   280   285

Gly Ile Gln Lys Arg Glu Ala Ser Asn Cys Phe Ala Ile Arg His Phe
    290   295   300

Glu Asn Lys Phe Ala Val Glu Thr Leu Ile Cys Ser
305   310   315

<210> 1429
<211> 398
<212> PRT
<213> Homo sapiens

<400> 1429
His Thr Arg Val Asp Phe Asn Val Pro Met Lys Asn Asn Gln Ile Thr
  1   5   10   15

Asn Asn Gln Arg Ile Lys Ala Ala Val Pro Ser Ile Lys Phe Cys Leu
            20   25   30

Asp Asn Gly Ala Lys Ser Val Val Leu Met Ser His Leu Gly Arg Pro
            35   40   45

Asp Gly Val Pro Met Pro Asp Lys Tyr Ser Leu Glu Pro Val Ala Val
    50   55   60

1505

```
Glu Leu Lys Ser Leu Leu Gly Lys Asp Val Leu Phe Leu Lys Asp Cys
65              70              75                  80

Val Gly Pro Glu Val Glu Lys Ala Cys Ala Asn Pro Ala Ala Gly Ser
                85              90                  95

Val Ile Leu Leu Glu Asn Leu Arg Phe His Val Glu Glu Glu Gly Lys
            100             105             110

Gly Lys Asp Ala Ser Gly Asn Lys Val Lys Ala Glu Pro Ala Lys Ile
        115             120             125

Glu Ala Phe Arg Ala Ser Leu Ser Lys Leu Gly Asp Val Tyr Val Asn
    130             135             140

Asp Ala Phe Gly Thr Ala His Arg Ala His Ser Ser Met Val Gly Val
145             150             155             160

Asn Leu Pro Gln Lys Ala Gly Gly Phe Leu Met Lys Lys Glu Leu Asn
                165             170             175

Tyr Phe Ala Lys Ala Leu Glu Ser Pro Glu Arg Pro Phe Leu Ala Ile
            180             185             190

Leu Gly Gly Ala Lys Val Ala Asp Lys Ile Gln Leu Ile Asn Asn Met
        195             200             205

Leu Asp Lys Val Asn Glu Met Ile Ile Gly Gly Gly Met Ala Phe Thr
    210             215             220

Phe Leu Lys Val Leu Asn Asn Met Glu Ile Gly Thr Ser Leu Phe Asp
225             230             235             240

Glu Glu Gly Ala Lys Ile Val Lys Asp Leu Met Ser Lys Ala Glu Lys
                245             250             255

Asn Gly Val Lys Ile Thr Leu Pro Val Asp Phe Val Thr Ala Asp Lys
            260             265             270

Phe Asp Glu Asn Ala Lys Thr Gly Gln Ala Thr Val Ala Ser Gly Ile
        275             280             285

Pro Ala Gly Trp Met Gly Leu Asp Cys Gly Pro Glu Ser Ser Lys Lys
    290             295             300

Tyr Ala Glu Ala Val Thr Arg Ala Lys Gln Ile Val Trp Asn Gly Pro
305             310             315             320

Val Gly Val Phe Glu Trp Glu Ala Phe Ala Arg Gly Thr Lys Ala Leu
                325             330             335
```

1506

```
Met Asp Glu Val Val Lys Ala Thr Ser Arg Gly Cys Ile Thr Ile Ile
        340             345             350

Gly Gly Gly Asp Thr Ala Thr Cys Cys Ala Lys Trp Asn Thr Glu Asp
        355             360             365

Lys Val Ser His Val Ser Thr Gly Gly Gly Ala Ser Leu Glu Leu Leu
    370             375             380

Glu Gly Lys Val Leu Pro Gly Val Asp Ala Leu Ser Asn Ile
385             390             395 .
```

```
<210> 1430
<211> 249
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (245)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1430
Pro Ala Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala Phe
  1           5             10              15

Gly Pro Ala Phe Ala Leu Phe Leu Ile Thr Val Ala Gly Asp Pro Leu
        20              25              30

Arg Val Ile Ile Leu Val Ala Gly Ala Phe Phe Trp Leu Val Ser Leu
        35              40              45

Leu Leu Ala Ser Val Val Trp Phe Ile Leu Val His Val Thr Asp Arg
    50              55              60

Ser Asp Ala Arg Leu Gln Tyr Gly Leu Leu Ile Phe Gly Ala Ala Val
65              70              75              80

Ser Val Leu Leu Gln Glu Val Phe Arg Phe Ala Tyr Tyr Lys Leu Leu
                85              90              95

Lys Lys Ala Asp Glu Gly Leu Ala Ser Leu Ser Glu Asp Gly Arg Ser
            100             105             110

Pro Ile Ser Ile Arg Gln Met Ala Tyr Val Ser Gly Leu Ser Phe Gly
        115             120             125

Ile Ile Ser Gly Val Phe Ser Val Ile Asn Ile Leu Ala Asp Ala Leu
```

1507

                130   135   140

Gly Pro Gly Val Val Gly Ile His Gly Asp Ser Pro Tyr Tyr Phe Leu
145   150   155   160

Thr Ser Ala Phe Leu Thr Ala Ala Ile Ile Leu Leu His Thr Phe Trp
                       165   170   175

Gly Val Val Phe Phe Asp Ala Cys Glu Arg Arg Arg Tyr Trp Ala Leu
                180   185   190

Gly Leu Val Val Gly Ser His Leu Leu Thr Ser Gly Leu Thr Phe Leu
                195   200   205

Asn Pro Trp Tyr Glu Ala Ser Leu Leu Pro Ile Tyr Ala Val Thr Val
                210   215   220

Ser Met Gly Leu Trp Ala Phe Ile Thr Ala Gly Gly Ser Leu Arg Ser
225   230   235   240

Ile Gln Arg Ser Xaa Leu Cys Lys Asp
                245

<210> 1431
<211> 271
<212> PRT
<213> Homo sapiens

<400> 1431
Arg Pro Thr Arg Pro Val Met Ala Pro Arg Ser Leu Leu Leu Leu Leu
  1   5   10   15

Ser Gly Ala Leu Ala Leu Thr Asp Thr Trp Ala Gly Ser His Ser Leu
                20   25   30

Arg Tyr Phe Ser Thr Ala Val Ser Arg Pro Gly Arg Gly Glu Pro Arg
                35   40   45

Tyr Ile Ala Val Glu Tyr Val Asp Asp Thr Gln Phe Leu Arg Phe Asp
       50   55   60

Ser Asp Ala Ala Ile Pro Arg Met Glu Pro Arg Glu Pro Trp Val Glu
65   70   75   80

Gln Glu Gly Pro Gln Tyr Trp Glu Trp Thr Thr Gly Tyr Ala Lys Ala
                85   90   95

Asn Ala Gln Thr Asp Arg Val Ala Leu Arg Asn Leu Leu Arg Arg Tyr
                100   105   110

1508

```
Asn Gln Ser Glu Ala Gly Ser His Thr Leu Gln Gly Met Asn Gly Cys
        115             120             125

Asp Met Gly Pro Asp Gly Arg Leu Leu Arg Gly Tyr His Gln His Ala
    130             135             140

Tyr Asp Gly Lys Asp Tyr Ile Ser Leu Asn Glu Asp Leu Arg Ser Trp
145             150             155             160

Thr Ala Ala Asp Thr Val Ala Gln Ile Thr Gln Arg Phe Tyr Glu Ala
            165             170             175

Glu Glu Tyr Ala Glu Glu Phe Arg Thr Tyr Leu Glu Gly Glu Cys Leu
        180             185             190

Glu Leu Leu Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg
        195             200             205

Ala Asp Pro Pro Lys Ala His Val Ala His His Pro Ile Ser Asp His
    210             215             220

Glu Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile
225             230             235             240

Thr Leu Thr Trp Gln Arg Asp Gly Glu Glu Gln Thr Gln Asp Thr Glu
            245             250             255

Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Arg Ser Gly
            260             265             270
```

```
<210> 1432
<211> 455
<212> PRT
<213> Homo sapiens

<400> 1432
Ala His Ala Ser Gly Ala Pro Glu Gln Arg Pro Arg Pro Pro Arg Leu
  1           5               10              15

Leu Arg Arg Asp Leu Glu Arg Lys Thr Pro Ala Arg Arg Pro Ala Leu
            20              25              30

Ala Ser Leu Pro Thr Gly His Thr Ala Pro Pro Pro Arg Pro Arg Cys
        35              40              45

Ala Arg Pro Val Arg Cys Thr Pro Ala Cys Trp Arg Leu Arg Arg Arg
    50              55              60
```

1509

```
Ala Arg Pro Gly Leu Leu Leu Arg Ala Thr Met Ser Ser Arg Ile Ala
65                   70                75                    80

Arg Ala Leu Ala Leu Val Val Thr Leu Leu His Leu Thr Arg Leu Ala
                85                 90                    95

Leu Ser Thr Cys Pro Ala Ala Cys His Cys Pro Leu Glu Ala Pro Lys
            100             105             110

Cys Ala Pro Gly Val Gly Leu Val Arg Asp Gly Cys Gly Cys Cys Lys
        115             120             125

Val Cys Ala Lys Gln Leu Asn Glu Asp Cys Ser Lys Thr Gln Pro Cys
    130             135             140

Asp His Thr Lys Gly Leu Glu Cys Asn Phe Gly Ala Ser Ser Thr Ala
145             150             155             160

Leu Lys Gly Ile Cys Arg Ala Gln Ser Glu Gly Arg Pro Cys Glu Tyr
            165             170             175

Asn Ser Arg Ile Tyr Gln Asn Gly Glu Ser Phe Gln Pro Asn Cys Lys
            180             185             190

His Gln Cys Thr Cys Ile Asp Gly Ala Val Gly Cys Ile Pro Leu Cys
        195             200             205

Pro Gln Glu Leu Ser Leu Pro Asn Leu Gly Cys Pro Asn Pro Arg Leu
    210             215             220

Val Lys Val Thr Gly Gln Cys Cys Glu Glu Trp Val Cys Asp Glu Asp
225             230             235             240

Ser Ile Lys Asp Pro Met Glu Asp Gln Asp Gly Leu Leu Gly Lys Glu
            245             250             255

Leu Gly Phe Asp Ala Ser Glu Val Glu Leu Thr Arg Asn Asn Glu Leu
            260             265             270

Ile Ala Val Gly Lys Gly Ser Ser Leu Lys Arg Leu Pro Val Phe Gly
        275             280             285

Met Glu Pro Arg Ile Leu Tyr Asn Pro Leu Gln Gly Gln Lys Cys Ile
    290             295             300

Val Gln Thr Thr Ser Trp Ser Gln Cys Ser Lys Thr Cys Gly Thr Gly
305             310             315             320

Ile Ser Thr Arg Val Thr Asn Asp Asn Pro Glu Cys Arg Leu Val Lys
            325             330             335
```

```
Glu Thr Arg Ile Cys Glu Val Arg Pro Cys Gly Gln Pro Val Tyr Ser
            340             345             350

Ser Leu Lys Lys Gly Lys Lys Cys Ser Lys Thr Lys Lys Ser Pro Glu
        355             360             365

Pro Val Arg Phe Thr Tyr Ala Gly Cys Leu Ser Val Lys Lys Tyr Arg
    370             375             380

Pro Lys Tyr Cys Gly Ser Cys Val Asp Gly Arg Cys Cys Thr Pro Gln
385             390             395             400

Leu Thr Arg Thr Val Lys Met Arg Phe Arg Cys Glu Asp Gly Glu Thr
            405             410             415

Phe Ser Lys Asn Val Met Met Ile Gln Ser Cys Lys Cys Asn Tyr Asn
        420             425             430

Cys Pro His Ala Asn Glu Ala Ala Phe Pro Phe Tyr Arg Leu Phe Asn
        435             440             445

Asp Ile His Lys Phe Arg Asp
    450             455
```

```
<210> 1433
<211> 87
<212> PRT
<213> Homo sapiens

<400> 1433
Thr Glu Gly Glu Thr Trp Arg Ser Asp Ser Glu Val Arg Leu Gln Leu
    1               5               10              15

Ala His His Leu Arg Pro Gly Pro Asp Glu Pro Pro Val Ala Ser Ala
                20              25              30

Gly Ala Ala Ala Ala Ser Arg Gly Ala Cys Gly Pro Ser His Ser Arg
        35              40              45

His Cys Leu Pro Ala Gly Leu Glu Pro Ser Glu Arg Pro Asn Pro Arg
    50              55              60

Pro Gly Arg Asp Leu Arg Gly Met Thr Ala Glu Pro Pro Lys Gly Gly
65              70              75              80

Glu Phe Glu Gly Arg Gly Pro
                85
```

1511

```
<210> 1434
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1434
Val Trp Arg Ala Gly Ala Gly Met Ala Ser Leu Arg Ser Gln His Gly
 1               5                  10                  15


Pro Gly Ala Pro Glu Ser Leu Arg Lys Val Leu Met Pro Ser Ser Met
            20                  25                  30


Gly Leu Leu Leu Ile Leu Tyr Ala Arg Leu Pro Pro Ser Leu Val Gly
        35                  40                  45


Gln Ala Gly Arg Trp Ile Gly Trp Ala Gly Arg Ala Gly Gly Gln Ala
    50                  55                  60


Val Arg Gln Pro Ser Pro Thr Val Leu Ile Asp Gly Val Glu Cys Ser
65                  70                  75                  80


Asp Val Lys Phe Phe Gln Leu Ala Ala Gln Trp Ser Ser His Val Lys
                85                  90                  95


His Phe Pro Ile Cys Ile Phe Gly His Ser Lys Ala Thr Phe
                100                 105                 110



<210> 1435
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1435
Gly Ser Gln Asp Ala Arg Arg Gly Ser Gly Leu Gly Val Ser Ser Phe
 1               5                  10                  15


Leu Arg Gly Ser Gly Gly Ser Gly Pro Leu Trp Val Gln His Gly Lys
            20                  25                  30


Arg Gly Arg Tyr Phe Ser Ser Trp Ala Phe Ile Lys Glu Lys Thr Met
        35                  40                  45


Leu Ala Gly Arg Gly Gly Ser Arg Leu Gln Ser Gln His Phe Gly Arg
    50                  55                  60


Pro Arg Arg Val Asp His Leu Arg Ser Gly Val Gln Asp Gln Pro Gly
65                  70                  75                  80
```

Gln His Gly Glu Thr Pro Ser Leu Leu Lys Asn Thr Lys Ile Ser Gln
                85   90   95

Val Trp Trp Leu Thr Leu Met
            100

<210> 1436
<211> 413
<212> PRT
<213> Homo sapiens

<400> 1436
Asn Glu Cys Thr Gly Pro Glu Phe Arg Val Asp Pro Arg Val Ala Ser
 1   5   10   15

Ala Pro Arg Ala Gln Ser Leu Ala Phe Ala Asp Pro Pro Pro Val His
            20   25   30

Thr Arg Arg Gln Leu Thr Met Asp Asp Asp Ile Ala Ala Leu Val Val
            35   40   45

Asp Asn Gly Ser Gly Met Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala
      50   55   60

Pro Arg Ala Val Phe Pro Ser Ile Val Gly Arg Pro Arg His Gln Gly
 65   70   75   80

Val Met Val Gly Met Gly Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala
                85   90   95

Gln Ser Lys Arg Gly Ile Leu Thr Leu Lys Tyr Pro Ile Glu His Gly
            100   105   110

Ile Val Thr Asn Trp Asp Asp Met Glu Lys Ile Trp His His Thr Phe
            115   120   125

Tyr Asn Glu Leu Arg Val Ala Pro Glu Glu His Pro Val Leu Leu Thr
      130   135   140

Glu Ala Pro Leu Asn Pro Lys Ala Asn Arg Glu Lys Met Thr Gln Ile
145   150   155   160

Met Phe Glu Thr Phe Asn Thr Pro Ala Met Tyr Val Ala Ile Gln Ala
                165   170   175

Val Leu Ser Leu Tyr Ala Ser Gly Arg Thr Thr Gly Ile Val Met Asp
            180   185   190

Ser Gly Asp Gly Val Thr His Thr Val Pro Ile Tyr Glu Gly Tyr Ala

1513

```
              195                    200                    205

Leu Pro His Ala Ile Leu Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr
    210             215             220

Asp Tyr Leu Met Lys Ile Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr
    225             230             235             240

Thr Ala Glu Arg Glu Ile Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr
            245             250             255

Val Ala Leu Asp Phe Glu Gln Glu Met Ala Thr Ala Ala Ser Ser Ser
            260             265             270

Ser Leu Glu Lys Ser Tyr Glu Leu Pro Asp Gly Gln Val Ile Thr Ile
        275             280             285

Gly Asn Glu Arg Phe Arg Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe
    290             295             300

Leu Gly Met Glu Ser Cys Gly Ile His Glu Thr Thr Phe Asn Ser Ile
305             310             315             320

Met Lys Cys Asp Val Asp Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val
            325             330             335

Leu Ser Gly Gly Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln
            340             345             350

Lys Glu Ile Thr Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile
        355             360             365

Ala Pro Pro Glu Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu
    370             375             380

Ala Ser Leu Ser Thr Phe Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr
385             390             395             400

Asp Glu Ser Gly Pro Ser Ile Val His Arg Lys Cys Phe
            405             410
```

<210> 1437
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1437
Val Val Pro Ser Thr Lys Asp Phe Leu Val Gly Val Lys Gly Ser Gly
1   5   10   15

Gly His Arg Gly Gly Gly Glu Met Ala Phe Ser Xaa Ser Gln Ala Pro
                20   25   30

Tyr Leu Ser Pro Ala Val Pro Phe Ser Gly Thr Ile Gln Gly Gly Leu
        35   40   45

Gln Asp Gly Leu Gln Ile Thr Val Asn Gly Thr Val Leu Ser Ser Ser
    50   55   60

Gly Thr Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro Arg Phe Glu
65   70   75   80

Asp Gly Gly Tyr Val Val Cys Thr Ala Gly Arg Thr Glu Ala Gly Gly
                85   90   95

Pro

<210> 1438
<211> 153
<212> PRT
<213> Homo sapiens

<400> 1438
Leu Ala Pro Leu Arg Cys Gln Pro Gly Thr Arg Thr Gln Pro Arg Ser
1   5   10   15

His Pro Ala Ala Asn Asp Pro Ser Ala Ala Met Ser Ala Ala Gly Ala
                20   25   30

Arg Gly Leu Arg Ala Thr Tyr His Arg Leu Leu Asp Lys Val Glu Leu
        35   40   45

Met Leu Pro Glu Lys Leu Arg Pro Leu Tyr Asn His Pro Ala Gly Pro
    50   55   60

Arg Thr Val Phe Phe Trp Ala Pro Ile Met Lys Trp Gly Leu Val Cys
65   70   75   80

Ala Gly Leu Ala Asp Met Ala Arg Pro Ala Glu Lys Leu Ser Thr Ala
                85   90   95

Gln Ser Ala Val Leu Met Ala Thr Gly Phe Ile Trp Ser Arg Tyr Ser

1515

```
                    100                    105                    110

    Leu Val Ile Ile Pro Lys Asn Trp Ser Leu Phe Ala Val Asn Phe Phe
            115                    120                    125

    Val Gly Ala Ala Gly Ala Ser Gln Leu Phe Arg Ile Trp Arg Tyr Asn
            130                    135                    140

    Gln Glu Leu Lys Ala Lys Ala His Lys
    145                    150
```

```
<210> 1439
<211> 343
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (244)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (305)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (325)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (328)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (340)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1439
Trp Ile Gln Arg Ile Arg Ala Arg Gly Lys Thr Asn Leu Arg Arg Thr
  1                 5                    10                    15

Thr Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu Asp Met Gly Phe
            20                    25                    30

Glu Pro Gln Ile Arg Lys Ile Val Asp Gln Ile Arg Pro Asp Arg Gln
```

1516

```
                    35                    40                    45

    Thr Leu Met Trp Ser Ala Thr Trp Pro Lys Glu Val Arg Gln Leu Ala
        50                  55                  60

    Glu Asp Phe Leu Lys Asp Tyr Ile His Ile Asn Ile Gly Ala Leu Glu
    65                  70                  75                  80

    Leu Ser Ala Asn His Asn Ile Leu Gln Ile Val Asp Val Cys His Asp
                    85                  90                  95

    Val Glu Lys Asp Glu Lys Leu Ile Arg Leu Met Glu Glu Ile Met Ser
                    100                 105                 110

    Glu Lys Glu Asn Lys Thr Ile Val Phe Val Glu Thr Lys Arg Arg Cys
                    115                 120                 125

    Asp Glu Leu Thr Arg Lys Met Arg Arg Asp Gly Trp Pro Ala Met Gly
        130                 135                 140

    Ile His Gly Asp Lys Ser Gln Gln Glu Arg Asp Trp Val Leu Asn Glu
    145                 150                 155                 160

    Phe Lys His Gly Lys Ala Pro Ile Leu Ile Ala Thr Asp Val Ala Ser
                    165                 170                 175

    Arg Gly Leu Asp Val Glu Asp Val Lys Phe Val Ile Asn Tyr Asp Tyr
                    180                 185                 190

    Pro Asn Ser Ser Glu Asp Tyr Ile His Arg Ile Gly Arg Thr Ala Arg
        195                 200                 205

    Ser Thr Lys Thr Gly Thr Ala Tyr Thr Phe Phe Thr Pro Asn Asn Ile
        210                 215                 220

    Lys Gln Val Ser Asp Leu Ile Ser Val Leu Arg Glu Ala Asn Gln Ala
    225                 230                 235                 240

    Ile Asn Pro Xaa Leu Leu Gln Leu Val Glu Asp Arg Gly Ser Gly Arg
                    245                 250                 255

    Ser Arg Gly Arg Gly Gly Met Lys Asp Asp Arg Arg Asp Arg Tyr Ser
                    260                 265                 270

    Ala Gly Lys Arg Gly Gly Phe Asn Thr Phe Arg Asp Arg Glu Asn Tyr
                    275                 280                 285

    Asp Arg Gly Tyr Ser Ser Leu Leu Lys Arg Asp Phe Gly Ala Lys Thr
        290                 295                 300

    Xaa Asn Gly Gly Tyr Ser Ala Cys Lys Phe Thr Asn Gly Ser Phe Gly
```

1517

305   310   315   320

Ser Asn Phe Gly Xaa Cys Trp Xaa Ser Gly Pro Val Leu Gly Leu Gly
                325   330   335

Ile Pro Thr Xaa Ala Leu Pro
            340

<210> 1440
<211> 122
<212> PRT
<213> Homo sapiens

<400> 1440
Ile Cys Val Ser Ala Arg Arg Ala Leu Ser Gly Leu Glu His Gly Leu
  1   5   10   15

Gly Trp Glu Arg Val Trp Glu Lys Met Gly Asn Lys Glu Pro Gly Ser
            20   25   30

His Gly His Arg Ser Asp Ala Asp Pro Ser Arg Phe Ser Pro Val Leu
        35   40   45

Pro Pro Ala Val Gln Leu Gly Val Trp Arg Glu Glu Gly Arg Gly Gly
      50   55   60

Ser Cys Pro Phe Ser Trp Gly Arg Gly Pro Val Ser Ser Thr Trp Leu
  65   70   75   80

Phe Pro Lys Gly Ser Lys Arg Glu Gly Leu Gly Glu Lys Thr Met Glu
                85   90   95

Arg Gly Pro Ala Lys Glu Asn Arg Glu Glu Val Ser Gly Leu Ile Ser
            100   105   110

Leu Leu Ser Arg Cys Ser Gly Ser Leu Ile
        115   120

<210> 1441
<211> 74
<212> PRT
<213> Homo sapiens

<400> 1441
Gly His Arg His Thr Pro Pro His Leu Ala Asn Phe Tyr Tyr Phe Phe
  1   5   10   15

```
Cys Arg Asp Glu Val Ser Leu Cys Pro Gly Trp Ser Gln Thr Pro Val
            20              25              30

Leu Lys Gln Ser Ser His Leu Gly Ser Leu Ser Ala Gly Ile Ile Gly
            35              40              45

Met Ser His Arg Ala Arg Pro His Val Cys Met Leu Lys Val Leu Arg
        50              55              60

Ile Pro Met Glu Asn Lys Phe Asp Phe Ala
65              70
```

```
<210> 1442
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442
Ala Xaa Xaa His Gln Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro
 1               5              10              15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu
            20              25              30

Phe Gly Thr Arg Glu Ala Glu Ala Gly Val Gln Trp Cys Asp Leu Gly
            35              40              45

Ser Leu Gln Pro Leu Pro Pro Arg Phe Gln Gln Phe Ser Cys Leu Ser
        50              55              60

Leu Pro Ser Gly Trp Asp Asp Arg Arg Leu Pro Ser Cys Leu Thr Ser
65              70              75              80

Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp
                85              90              95

Ser Gln Thr Pro Asp Leu Arg
            100
```

1519

```
<210> 1443
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids
```

1520

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1443
Leu His Ala Ala Ala Cys Ala Ala Ala Met Ser Leu Val Ile Pro Glu
 1   5   10   15

Lys Phe Gln His Ile Leu Arg Val Leu Asn Thr Asn Ile Asp Gly Arg
            20   25   30

Arg Lys Ile Ala Phe Ala Ile Thr Ala Ile Lys Gly Val Gly Arg Xaa
        35   40   45

Tyr Ala His Val Xaa Leu Arg Lys Xaa Xaa Ile Asp Leu Thr Xaa Arg
    50   55   60

Ala Xaa Glu Leu Thr Xaa Asp Xaa Val Glu Arg Val Ile Thr Ile Met
65   70   75   80

Gln Asn Xaa Arg Gln Tyr Lys Ile Pro Asp Trp Phe Leu Asn Arg Gln
            85   90   95

Asn Asp Xaa Xaa Asp Xaa Ser Thr Ser Ser
            100   105

<210> 1444
<211> 14
<212> PRT
<213> Homo sapiens

<400> 1444
Pro Val Trp Pro Lys Trp Ser Gly Trp Pro Leu Ala Leu Pro
 1   5   10

1521

```
<210> 1445
<211> 126
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1445
Phe Leu Arg Leu Val Leu Gly Leu Leu Ile Gly Arg Cys Leu Gln Glu
 1           5                  10                  15

Met Leu Lys Leu Gly Thr Leu Pro Pro Thr Ser Lys Pro Gln Leu Leu
            20                  25                  30

Cys Gln Met Val Ser Leu Lys Ile Ser Ala Cys Leu Thr Thr Lys Gly
            35                  40                  45

Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys
    50                  55                  60

Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg Ala Glu Glu Phe Lys Lys
65                  70                  75                  80

Leu Asn Cys Gln Val Ile Gly Ala Ser Val Asp Ser His Phe Cys His
                85                  90                  95

Leu Ala Trp Val Asn Thr Pro Xaa Lys Gln Gly Gly Leu Gly Pro Met
            100                 105                 110

Asn Ile Pro Leu Val Ser Xaa Pro Thr His Xaa Xaa Ser Gly
            115                 120                 125
```

1522

```
<210> 1446
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1446
Cys Asp Lys Glu Lys Asn Leu Leu His Val Thr Asp Thr Gly Val Gly
 1               5                  10                  15


Met Thr Arg Glu Glu Leu Val Lys Asn Leu Gly Thr Ile Ala Lys Ser
                20                  25                  30


Gly Thr Ser Glu Phe Leu Asn Lys Met Thr Glu Ala Gln Glu Asp Gly
                35                  40                  45


Gln Ser Thr Ser Asp Leu Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser
        50                  55                  60


Ala Phe Leu Val Ala Asp Lys Val Ile Val Thr Ser Lys His Asn Asn
65                  70                  75                  80


Asp Thr Gln His Ile Trp Glu Ser Asp Ser Asn Xaa Phe Ser Val Asn
                85                  90                  95


Cys
```

```
<210> 1447
<211> 47
<212> PRT
<213> Homo sapiens

<400> 1447
His Ser Arg His Arg Gly Val Phe Leu Thr Pro Leu Leu Ala Met Ser
 1               5                  10                  15


Ser His Lys Thr Phe Arg Ile Lys Arg Phe Leu Ala Lys Lys Gln Lys
                20                  25                  30


Gln Asn Arg Pro Ile Pro Gln Trp Ile Arg Met Lys Thr Gly Lys
                35                  40                  45
```

```
<210> 1448
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1448
Val Phe Arg Val Glu Ala Trp Arg Thr Ser Gly Glu Thr Pro Ala Ile
 1               5                  10                  15

Ser Pro Ser Lys Arg Ala Arg Pro Ala Glu Val Gly Gly Met Gln Leu
            20                  25                  30

Arg Phe Ala Arg Leu Ser Glu His Ala Thr Ala Pro Thr Arg Gly Ser
        35                  40                  45

Ala Arg Ala Ala Gly Tyr Asp Leu Tyr Ser Ala Tyr Asp Tyr Thr Ile
    50                  55                  60

Pro Pro Met Glu Lys Ala Val Val Lys Thr Asp Ile Gln Ile Ala Leu
65                  70                  75                  80

Pro Ser Gly Cys Xaa Gly Arg Val Ala Pro Arg Ser Gly Leu Ala Ala
                85                  90                  95

Lys His Phe Ile Asp Val Gly Xaa Val Ser
            100                 105
```

```
<210> 1449
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

1524

<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1449
Thr Met Ala Val Gly Lys Asn Lys Arg Leu Thr Lys Gly Gly Lys Lys
1   5   10   15

Gly Ala Lys Lys Lys Val Val Asp Pro Phe Phe Lys Lys Asp Trp Tyr
            20   25   30

Asp Val Lys Ala Pro Ala Met Phe Xaa Ile Arg Xaa Ile Gly Lys Thr
            35   40   45

Leu Val Thr Arg Thr Gln Gly Thr Lys Ile Ala Ser
        50   55   60

<210> 1450
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1450
Asn Phe Gly Ser Leu Leu Gly Ala Cys Leu Ile Leu Gln Ile Thr Thr
1   5   10   15

Gly Leu Phe Leu Ala Met His Tyr Ser Pro Asp Ala Ser Thr Ala Phe
            20   25   30

Ser Ser Ile Ala His Ile Thr Arg Asp Val Asn Tyr Gly
            35   40   45

<210> 1451
<211> 34
<212> PRT
<213> Homo sapiens

<400> 1451
Lys Leu Leu Asp Asp Asn Gly Asn Ile Ala Glu Glu Leu Ser Ile Leu
1   5   10   15

Lys Trp Asn Thr Asp Ser Val Glu Glu Phe Leu Ser Glu Lys Leu Glu
            20   25   30

Arg Ile

```
<210> 1452
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1452
Pro Arg Val Arg Leu Xaa Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro
 1               5                   10                  15

Val Asp Gly Leu Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg
                20                  25                  30

Gly His Tyr Phe Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala
                35                  40                  45

Arg Arg Ile Thr Glu Val Leu Gly Asn Pro Phe Pro His
        50                  55                  60
```

```
<210> 1453
<211> 44
<212> PRT
<213> Homo sapiens

<400> 1453
Arg Glu Gln Lys Leu Glu Leu His Arg Gly Ala Ala Ala Leu Glu Leu
 1               5                   10                  15

Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Gly Cys Ser Glu Pro
                20                  25                  30

Arg Ser His His Cys Thr Pro Val Trp Ala Thr Glu
                35          .       40
```

```
<210> 1454
<211> 118
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

1526

```
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1454
Thr Arg Val Ala Pro Ser Val Leu Arg Leu Ala Met Thr Ser Tyr Ser
  1               5                  10                  15

Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe Gly Gly Leu Gly Gly Gly
            20                  25                  30

Ser Val Arg Ile Gly Pro Gly Val Ala Phe Arg Ala Pro Ser Ile His
            35                  40                  45

Gly Gly Ser Gly Gly Arg Gly Val Ser Val Ser Ser Ala Arg Phe Val
     50                  55                  60

Ser Ser Ser Ser Ser Gly Gly Tyr Gly Gly Gly Xaa Gly Gly Val Leu
 65                  70                  75                  80

Thr Ala Ser Xaa Gly Leu Leu Ala Gly Asn Glu Lys Leu Thr Met Gln
                85                  90                  95

Asn Xaa Xaa Thr Ala Trp Leu Leu Leu Xaa Lys Phe Ala Pro Xaa Gly
            100                 105                 110

Ala Lys Gly Thr Lys Ser
```

1527

115


```
<210> 1455
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1455
Ala Xaa Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu
 1               5                  10                  15

Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg
            20                  25                  30

Met Xaa Val Glu Ala Asp Ile Asn Gly Leu Xaa Arg Cys Trp Met Ser
            35                  40                  45
```


```
<210> 1456
<211> 143
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1456
Gly Asp Tyr Ser His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys
 1               5                  10                  15

Ile Leu Gly Ala Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp
            20                  25                  30

Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu
        35                  40                  45

Gln Ala Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg
        50                  55                  60

Val Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile
65                  70                  75                  80

Glu Gly Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu
                85                  90                  95

Glu Ile Ser Thr Leu Arg Gly Gln Val Gly Gly Gln Val Ser Val Glu
            100                 105                 110

Val Asp Ser Ala Pro Gly Thr Asp Leu Ala Lys Ile Leu Ser Asp Met
            115                 120                 125

Arg Ser Xaa Tyr Glu Val Met Ala Xaa Gln Asn Arg Lys Asp Ala
        130                 135                 140


<210> 1457
<211> 116
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1457
Gly Cys Val Gly Val Arg Pro Ser Leu His Pro Ala Thr Ser Thr Ala
 1               5                  10                  15

Ser Gly Ser Ala Xaa Pro Thr Leu Ala Arg Ala Met Ala Ser Val Ser
            20                  25                  30

Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu His Asp Asp Glu Val
```

1529

```
              35                   40                   45
   Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile Lys Ala Ala Gly Val
      50                   55                   60

   Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala Lys Ala Leu Ala Asn
      65                   70                   75                   80

   Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly Ala Gly Gly Pro Ala
                      85                   90                   95

   Pro Ala Ala Gly Ala Ala Thr Ser Arg Arg Ser Cys Pro Leu His Cys
                      100                  105                  110

   Cys Cys Ser Ser
                 115
```

<210> 1458
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1458
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   Leu Val Pro Asn Ser Ala Arg Ala Ala Ala Ser Ala Ala Asp Ala Ala
    1               5                   10                   15

   Ala Met Arg Tyr Val Ala Ser Tyr Leu Leu Ala Ala Leu Gly Gly Asn
                  20                   25                   30

   Ser Ser Pro Ser Ala Lys Gly Ile Lys Lys Ile Leu Asp Asn Xaa Gly
                  35                   40                   45

   Ile Glu Ala Asp Asp Asp Arg Leu Asn Lys Val Ile Ser Glu Leu Asn
      50                   55                   60

   Gly Lys Asn Ile Glu Asp Val Ile Ala Gln Gly Ile Gly Lys Leu Ala
   65                   70                   75                   80

   Ser Val Pro Ala Gly Gly Ala Val Ala Val Ser Ala Ala Pro Gly Ser
                      85                   90                   95

   Ala Ala Pro Ala Ala Gly Ser Ala Pro Ala Ala Ala Glu Glu Lys Lys
                  100                  105                  110
```

1530

```
Asp Glu Lys
        115


<210> 1459
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1459
Ala Ser Asp Ala Leu His Ser Leu Ser Ala Pro Val Leu Arg Leu Ser
 1               5                  10                      15

Ser Arg Ser Ala Ala Arg Pro Ala Thr Met Thr Glu Gln Ala Ile Ser
            20                  25                  30

Phe Ala Lys Asp Phe Leu Ala Gly Gly Ile Ala Ala Ala Ile Ser Lys
            35                  40                  45

Thr Ala Val Ala Pro Ile Glu Arg Val Lys Leu Leu Leu Gln Val Gln
    50                  55                  60

His Ala Ser Lys Gln Ile Ala Ala Asp Lys Gln Tyr Lys Gly Ile Val
65                  70                  75                      80

Asp Cys Ile Val Arg Ile Pro Lys Glu Gln Gly Val Leu Ser Phe Trp
                85                  90                  95

Arg Gly Asn Leu Ala Asn Val Ile Arg Tyr Phe Pro Thr Gln Ala Leu
            100                 105                 110
```

```
Asn Phe Xaa Phe Lys Asp Lys Tyr Lys Gln Xaa Phe Leu Xaa Gly Val
        115                 120                 125

Xaa Lys His Thr
    130
```

```
<210> 1460
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1460
Xaa Ser Xaa Lys Thr Gly Phe Xaa Asp Trp Ile Ser Val Ala Tyr Tyr
 1               5                  10                  15

Gly Cys Phe Arg Glu Gly Ala Thr Ile Ile Gln Val Gly Lys Leu Ile
            20              25                  30

Lys Glu Ala Ala Gly Lys Ser Asn Leu Lys Arg Val Thr Leu Glu Leu
        35              40                  45

Gly Gly Lys Ser Pro Cys Ile Val Leu Ala Asp Ala Asp Leu Asp Asn
     50              55                  60

Ala Val Glu Phe Ala His His Gly Val Phe Tyr His Gln Gly Gln Xaa
 65              70                  75                      80

Cys Ile Ala Ala Xaa Arg Ile Phe Val Glu Glu Ser Ile Tyr Asp Glu
                85                  90                  95

Phe Val Arg Arg Ser Val Glu Arg Val Lys Xaa Ile Ser Leu Gly Xaa
            100                 105                 110

Pro Leu Thr Pro Xaa Val Xaa Xaa Xaa Pro Ser Asp
            115             120


<210> 1461
<211> 179
<212> PRT
<213> Homo sapiens

<220>
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<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (173)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (176)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1461
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Val Val Pro Leu Ala
 1               5                   10                  15

Gly Thr Asn Gly Glu Thr Thr Thr Gln Gly Leu Asp Gly Leu Ser Glu
            20                  25                  30
```

```
Arg Cys Ala Gln Tyr Lys Lys Asp Gly Ala Asp Phe Ala Lys Trp Arg
         35                  40                  45

Cys Val Leu Lys Ile Gly Glu His Thr Pro Ser Ala Leu Ala Ile Met
         50                  55                  60

Glu Asn Ala Asn Val Leu Ala Arg Tyr Ala Ser Ile Cys Gln Gln Asn
 65                  70                  75                  80

Gly Ile Val Pro Ile Val Glu Pro Glu Ile Leu Pro Asp Gly Asp His
             85                  90                  95

Asp Leu Lys Arg Leu Xaa Val Cys Asp Arg Lys Gly Ala Trp Leu Ala
         100                 105                 110

Ala Thr Arg Leu Leu Ser Asp His His Ile Tyr Leu Xaa Gly Thr Leu
         115                 120                 125

Leu Lys Pro Asn Met Val Pro Gln Ala Met Leu Ala Leu Xaa Ser Phe
     130                 135                 140

Xaa Met Lys Glu Ile Ala His Gly Glu Pro Val Ser Xaa Ala Val Pro
145                 150                 155                 160

Ala Gln Xaa Pro Pro Arg Leu Ser Leu Gly Ile Asn Xaa Xaa Cys Xaa
             165                 170                 175

Gly Arg Pro



<210> 1462
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1462
Ala Asn Ser Leu Ala Cys Gln Gly Lys Tyr Thr Pro Xaa Gly Gln Ala
 1               5                  10                  15

Gly Ala Ala Ala Ser Glu Ser Leu Phe Val Ser Asn His Ala Tyr
             20                  25                  30
```

```
<210> 1463
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1463
Asp Asp Cys Glu Phe Lys Ala Glu Gly Asn Ser Lys Phe Thr Tyr Thr
 1               5                  10                  15


Val Leu Glu Asp Gly Cys Thr Lys His Thr Gly Glu Trp Ser Lys Thr
               20                  25                  30


Val Phe Glu Tyr Arg Thr Arg Lys Ala Val Arg Leu Pro Ile Val Asp
           35                  40                  45


Ile Ala Pro Tyr Asp Ile Gly Gly Pro Asp Gln Glu Phe Gly Val Asp
       50                  55                  60


Xaa Gly Pro Val Xaa Phe Leu
 65                  70



<210> 1464
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
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```
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1464
Xaa Gly Thr Arg His Xaa Leu Arg Thr Xaa Asn Gln Ser Ser Asp Glu
 1               5                   10                  15

Leu Gln Leu Ser Met Gly Asn Ala Met Phe Val Lys Glu Gln Leu Ser
                20                  25                  30

Leu Leu Asp Arg Phe Thr Glu Asp Ala Lys Arg Leu Tyr Gly Ser Glu
                35                  40                  45

Ala Phe Ala Thr Asp Phe Gln Asp Ser Ala Ala Ala Lys Lys Leu Ile
        50                  55                  60

Asn Asp Tyr Val Lys Asn Gly Thr Arg Gly Thr Ile Thr
 65                  70                  75


<210> 1465
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1465
Leu Lys Gly Arg Pro Gly Phe Pro Gly Ser Lys Gly Glu Ala Gly Phe
 1               5                   10                  15

Phe Gly Ile Pro Gly Leu Lys Gly Leu Ala Gly Glu Pro Gly Phe Lys
                20                  25                  30
```

1537

```
Gly Ser Arg Gly Asp Pro Gly Pro Pro Gly Pro Pro Pro Val Ile Leu
     35              40              45

Pro Gly Met Lys Asp Ile Lys Gly Glu Lys Gly Asp Glu Gly Pro Met
     50              55              60

Gly Leu Lys Gly Tyr Leu Gly Ala Lys Gly Ile Gln Gly Met Pro Gly
 65              70              75              80

Ile Pro Xaa Leu Ser Gly Ile Pro Gly Leu Pro Gly Arg Pro Gly His
             85              90              95

Ile Xaa Gly Ile Lys Gly Xaa Xaa Gly
             100             105
```

<210> 1466
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1466
```
Arg Pro Gly Leu Cys Ala Lys Thr Val Phe Lys Ala Leu Gln Ala Pro
 1               5               10              15

Ala Leu Xaa Glu Glu His Gly Glu Gly Trp Arg Leu His Pro Trp Gly
             20              25              30

Val Trp Glu Thr
         35
```

<210> 1467
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1467
Arg Val Pro Ala Met Ala Ala Lys Gly Gly Thr Val Lys Ala Ala Ser
 1               5                   10                  15


Ala Phe Asn Ala Thr Glu Asp Ala Gln Thr Leu Arg Lys Ala Met Lys
                20                  25                  30


Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr Arg
            35                  40                  45


Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala Leu Gln Glu His His
        50                  55                  60


Ser Ala Gly Asp Leu Val Leu Arg Asn Gly Pro Xaa Phe Val Xaa Xaa
 65                 70                  75                  80


Trp Xaa
```

```
<210> 1468
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1468
Gly Trp His Leu Gly Pro Pro Gly Ser Trp Cys Trp Trp Ser Xaa Cys
 1               5               10              15

Ile Thr Gly Pro Asn Thr Ser Xaa Cys Cys Trp Thr His Phe Glu Lys
             20              25              30

Pro Arg Xaa Ile Asp Asn Val Leu Val Ile Phe Ser His Asp Phe Trp
         35              40              45

Ser Thr Glu Ile Asn Gln Leu Ile Ala Gly Val Asn Xaa Cys Pro Val
     50              55              60

Leu Xaa Val Phe Phe Pro Phe Ser Ile Gln Leu Phe Pro Asn Xaa Phe
 65              70              75              80

Pro Xaa Xaa
```

```
<210> 1469
```

```
<211> 26
<212> PRT
<213> Homo sapiens

<400> 1469
Glu Lys Asp Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln
  1               5                  10                  15

Pro Lys Ile Val Lys Trp Asp Arg Asp Met
             20                  25



<210> 1470
<211> 168
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (148)
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1541

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1470
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Gly Gly Arg Ser
 1   5   10   15

Xaa Gly Ser Lys Leu Thr Tyr Ala Cys Met Arg Arg His Ser Ser Ser
             20   25   30

Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln Arg Arg
         35   40   45

Asp Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His
     50   55   60

Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu Glu Ala Arg Thr Asp Arg
 65   70   75   80

Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Lys Trp Asp Ala Pro Cys
             85   90   95

Ser Gly Ala Leu Ser Ala Ala Gly Val Val Val Thr Arg Ser Val Thr
             100   105   110

Ala Thr Leu Ala Ser Ala Leu Arg Pro Val Leu Ser Phe Leu Pro Phe
             115   120   125

Leu Ser Arg His Val Arg Arg Xaa Ser Pro Xaa Ser Xaa Lys Xaa Gly
     130   135   140

Ala Xaa Phe Xaa Val Pro Ile Xaa Xaa Leu Arg Asp Leu Xaa Pro Lys
145   150   155   160

Asn Leu Ile Arg Val Met Val Thr
             165

1542

<210> 1471
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1471
Cys His Leu Asn Ser Ile His Trp Pro Ser Phe Tyr Asn Val Val Thr
 1   5   10   15

Gly Lys Thr Leu Ala Xaa Pro Asn Leu Ile Ala Leu Gln His Ile Pro
             20   25   30

Leu Ser Pro Ala Gly Ser Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro
         35   40   45

Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Asp Ala Pro Cys Ser
     50   55   60

Gly Ala Leu Ser Ala Ala Gly Val Val Val Thr Arg Ser Val Thr Ala
65   70   75   80

Thr Leu Ala Ser Ala Leu Ala Xaa Ala Pro Phe Ala Phe Phe Pro Ser
                 85   90   95

```
Phe Leu Ala Thr Phe Ala Gly Phe Pro Arg Gln Ala Leu Asn Xaa Gly
            100                 105                 110

Leu Pro Leu Xaa Phe Arg Xaa Ser Ala Val Arg His Leu Asp Pro Lys
            115                 120                 125

Lys Leu Asp
    130
```

<210> 1472
<211> 179
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (179)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1472
Lys Lys Lys Lys Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1               5                  10                  15

Lys Lys Lys Lys Gly Gly Arg Xaa Xaa Gly Ser Lys Leu Thr Tyr Ala
            20                  25                  30

Cys Met Xaa Arg His Ser Ser Xaa Ile Gly Ser Pro Lys Phe Asn Ser
            35                  40                  45

Leu Ala Xaa Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr
        50                  55                  60

Gln Leu Asn Arg Leu Ala Xaa His Pro Xaa Phe Ala Ser Trp Arg Asn
 65                  70                  75                  80

Ser Xaa Lys Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu
                85                  90                  95

Asn Gly Lys Trp Asp Xaa Pro Cys Xaa Gly Ala Leu Xaa Xaa Ala Gly
                100                 105                 110
```

1546

```
Val Xaa Val Thr Xaa Xaa Xaa Thr Ala Thr Leu Ala Xaa Ala Leu Ala
        115             120             125
```

```
Pro Ala Pro Phe Ala Phe Phe Pro Ser Phe Xaa Ala Thr Phe Ala Gly
        130             135             140
```

```
Phe Pro Arg Gln Ala Xaa Asn Arg Gly Leu Pro Leu Gly Phe Arg Leu
145             150             155             160
```

```
Xaa Ala Leu Arg Asp Leu Xaa Pro Gln Lys Asn Leu Ile Arg Gly Asp
            165             170             175
```

```
Gly Ser Xaa
```


<210> 1473
<211> 58
<212> PRT
<213> Homo sapiens

<400> 1473
```
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1               5               10              15
```

```
Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20              25              30
```

```
Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35              40              45
```

```
Asn Arg Leu Ala Ala His Pro Pro Phe Ala
        50              55
```


<210> 1474
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1474
```
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1               5               10              15
```

```
Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20              25              30
```

```
Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35              40              45
```

```
Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50                  55                  60


Glu Ala Arg Thr Asp Arg
 65              70
```

<210> 1475
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1475
Leu Pro Xaa Ala Xaa Tyr Thr Xaa Xaa Gly Thr Thr Pro His Tyr Arg

1548

```
            1                 5                  10                  15

         Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr
                     20                      25                  30

         His Ala Ser Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Arg Xaa
                     35                      40                  45

         Asp Asp Leu Glu Asp Pro Lys Leu Thr Tyr Xaa Xaa Met Gln
                 50                      55                  60
```

<210> 1476
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (5)
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<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (29)
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1476
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Ile Arg Xaa Xaa Xaa Leu Arg Xaa Asp Thr Thr His Tyr Arg Glu Ser
 1               5                   10                  15

Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Xaa Thr His Ala
            20                  25                  30

Ser Val Glu Ile Cys Pro Pro Xaa Ser Arg Pro Xaa Ser Ser Gln Ser
            35                  40                  45

Asn Gly Glu Gly Tyr Ser Xaa Cys Arg Arg Pro Gln Ala Leu Glu Ala
    50                  55                  60

Ala Thr Tyr Leu Asn Pro Val Pro Xaa Arg Ile Leu Leu Lys Pro Phe
65                  70                  75                  80
```

<210> 1477
<211> 52
<212> PRT
<213> Homo sapiens

<400> 1477
```
Arg Gln Val Pro His Glu Arg Ala Val Arg Asp Gly Arg Gly Gly Gly
 1               5                   10                  15

Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met Arg Arg His Ser
            20                  25                  30

Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln
            35                  40                  45

Arg Arg Asp Trp
    50
```

1550


```
<210> 1478
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1478
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1           5               10              15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20              25              30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
            35              40              45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50              55              60

Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
65              70              75              80

Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
            85              90              95

Val Thr Arg Ser Val Thr Ala Thr Leu Ala Ser Ala Leu Ala Pro Ala
            100             105             110

Pro Phe Ala Phe Phe Pro Ser Phe Leu Ala Thr Phe Ala Gly Phe Pro
    115             120             125

Arg Gln Ala Leu Asn Arg Gly Leu Pro Leu Gly Xaa Arg Phe Lys Cys
    130             135             140

Phe Thr Asp Leu Asp Pro Lys Lys Leu Asp
145             150


<210> 1479
<211> 130
<212> PRT
<213> Homo sapiens

<220>
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```
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1479
Ile Ala Gly Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1               5              10             15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20             25             30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35             40             45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50             55             60

Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
65             70             75             80

Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
            85             90             95

Val Thr Arg Ser Val Thr Ala Thr Leu Ala Lys Arg Pro Lys Arg Pro
            100            105            110

Phe Leu Ser Leu Ser Ser Phe Leu Phe Xaa Pro Arg Ser Ala Gly Phe
        115            120            125

Ser Pro
    130


<210> 1480
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1480
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1               5                  10                  15    .

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20                  25                  30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
            35                  40                  45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50                  55                  60

Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
65                  70                  75                  80

Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
                85                  90                  95

Val Thr Arg Ser Val Thr Xaa Thr Leu Ala Ser Ala Leu Ala Pro Xaa
            100                 105                 110

Pro Phe Ala Phe Phe Leu Leu Ser Arg His Gly Arg Pro Ala Xaa Pro
            115                 120                 125

Xaa Lys Leu
    130
```

```
<210> 1481
<211> 112
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
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1553

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1481
Xaa Ser Ser Arg Ser Arg Ala Ala Arg Ser Arg Gly Ser Lys Leu Thr
 1   5   10   15

Tyr Ala Cys Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe
            20   25   30

Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly
        35   40   45

Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp
     50   55   60

His Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg
 65   70   75   80

Ser Leu Asn Gly Glu Trp Asp Xaa Pro Cys Ser Gly Ala Leu Ser Ala
            85   90   95

Ala Gly Val Val Val Thr Arg Ser Val Thr Ala Thr Leu Ala Ala Pro
            100   105   110

<210> 1482
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1482
Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro Glu

1554

```
           1                   5                  10                 15
         Xaa Ser Arg Glu Leu Asn Leu Cys Leu Xaa Lys Gln Leu Gly Arg Met
                     20                  25                 30

         Gly Arg Tyr Phe Val Leu Asn Leu Gln Tyr Phe Lys Arg Gly Ser Tyr
                     35                  40                 45

         Phe Xaa Ile Leu Cys
             50
```

<210> 1483
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1483
```
         Ala Asn Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr
           1                   5                  10                 15

         Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile
                     20                  25                 30

         Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala
                     35                  40                 45

         Gly Lys Gln Leu Glu Gly Trp Xaa Gln Leu Xaa Gln Thr
                 50                  55                 60
```

<210> 1484
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1484
Gly Glu Gly Pro Thr Xaa Pro Leu Pro Ser Glu Thr Xaa Gly Asp Val
 1   5   10   15

Ala Pro Leu Xaa Cys Xaa Xaa Gly Leu Asn Met
              20   25

<210> 1485
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

1556

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<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1485
Phe Leu Ala Ala Gly Asn Pro Leu Arg Trp Pro Xaa Ile Leu Thr Ser
  1               5                  10                  15


Arg Trp Lys Ser Asp Ile Tyr Xaa Arg Lys Ser Asp Gly Xaa Tyr Ile
            20                  25                  30


Ile Xaa Leu Lys Arg Thr Trp Glu Lys Leu Leu Leu Gly
        35                  40                  45




<210> 1486
<211> 140
<212> PRT
<213> Homo sapiens

<400> 1486
Pro Arg Val Arg Arg Ala Glu Trp Leu Cys Gly Arg Val Ser Glu Thr
  1               5                  10                  15


Gly Ser Ala Cys Ser Met Ala Asp Gln Leu Thr Glu Glu Gln Ile Ala
            20                  25                  30


Glu Phe Lys Glu Ala Phe Ser Leu Phe Asp Lys Asp Gly Asp Gly Thr
            35                  40                  45


Ile Thr Thr Lys Glu Leu Gly Thr Val Met Arg Ser Leu Gly Gln Asn
    50                  55                  60


Pro Thr Glu Ala Glu Leu Gln Asp Met Ile Asn Glu Val Asp Ala Asp
  65                  70                  75                  80


Gly Asn Gly Thr Ile Asp Phe Pro Glu Phe Leu Thr Met Met Ala Arg
                85                  90                  95


Lys Met Lys Asp Thr Asp Ser Glu Glu Glu Ile Arg Glu Ala Phe Arg
            100                 105                 110


Val Phe Asp Lys Asp Gly Asn Gly Tyr Ile Ser Ala Ala Glu Leu Arg
            115                 120                 125


His Val Met Thr Asn Leu Gly Arg Glu Val Asn Arg
        130                 135                 140
```

```
<210> 1487
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1487
Xaa Leu Gly Arg Asn Trp Ala Xaa Phe Thr Gly Lys Xaa Val Gly Xaa
  1               5                  10                  15

Ala Ser Xaa Asn Val Tyr Val His Ile Pro His Leu Arg Asn Ser His
             20              25                  30

Glu Lys Xaa Ser
         35


<210> 1488
<211> 34
<212> PRT
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1558

<213> Homo sapiens

<400> 1488
Ser Gly Pro Leu Trp Ile Leu Gly Asp Val Phe Ile Gly Arg Tyr Tyr
1   5   10   15

Thr Val Phe Asp Arg Asp Asn Asn Arg Val Gly Phe Ala Glu Ala Ala
            20   25   30

Arg Leu

<210> 1489
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1489
Pro Thr Asn Xaa Xaa Lys Ser Xaa Glu Leu His Arg Gly Gly Gly Arg
1   5   10   15

Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Thr
            20   25   30

Gln Arg Pro Val Asp Ile Val Phe Leu Leu Asp Gly Ser Glu Arg Leu
            35   40   45

Gly Glu Gln Asn Phe His Lys Ala Arg Arg Phe Val Glu Gln Val Ala
    50   55   60

```
Arg Arg Leu Thr Leu Ala Arg Arg Asp Asp Asp Pro Leu Asn Ala Arg
65              70              75              80

Val Ala Leu Leu Gln Phe Gly Gly Pro Gly Glu Gln Gln Val Ala Phe
                85              . 90             95

Pro Leu Ser His Asn Leu Thr Ala Ile His Glu Ala Leu Glu Thr Thr
            100             105             110

Gln Tyr Leu Asn Ser Phe Ser His Val Gly Ala Gly Val Val His Ala
        115             120             125

Ile Asn Ala Ile Val Arg Ser Pro Arg Gly Gly Ala Arg Arg His Ala
    130             135             140

Glu Leu Pro Ser Trp Ser Ser Arg Thr Ala Ser Arg Ala Thr Thr Xaa
145             150             155             160
```

<210> 1490
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

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<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1490
Ala Gln Met Gly Met Leu Lys Gly Pro Leu Leu Asn Lys Phe Leu Thr
 1               5                  10                  15

Thr Ala Lys Asp Lys Asn Arg Trp Glu Asp Xaa Gly Lys Gln Leu Tyr
             20                  25                  30

Asn Val Glu Ala Thr Ser Tyr Xaa Leu Xaa Ala Leu Leu Gln Leu Lys
         35                  40                  45

Xaa Phe Asp Phe Val Pro Pro Val Val Xaa Xaa Leu Asn Xaa Gln Arg
     50                  55                  60
```

1561

Xaa Tyr Gly Gly Gly Tyr Gly Ser Thr Gln Ala Thr Phe Met Val Phe
65   70   75   80

Gln Xaa Leu Ala Gln Xaa Gln Lys Asp Gly Pro Asp His Gln Ala Leu
          85   90   95

Asn Leu Xaa Val Xaa Leu Gln Met Leu
          100   105

<210> 1491
<211> 125
<212> PRT
<213> Homo sapiens

<400> 1491
Arg Asn Thr Leu Ile Ile Tyr Leu Asp Lys Val Ser His Ser Glu Asp
 1   5   10   15

Asp Cys Leu Ala Phe Lys Val His Gln Tyr Phe Asn Val Glu Leu Ile
          20   25   30

Gln Pro Gly Ala Val Lys Val Tyr Ala Tyr Tyr Asn Leu Glu Glu Ser
          35   40   45

Cys Thr Arg Phe Tyr His Pro Glu Lys Glu Asp Gly Lys Leu Asn Lys
   50   55   60

Leu Cys Arg Asp Glu Leu Cys Arg Cys Ala Glu Glu Asn Cys Phe Ile
65   70   75   80

Gln Lys Ser Asp Asp Lys Val Thr Leu Glu Glu Arg Leu Asp Lys Ala
          85   90   95

Cys Glu Pro Gly Val Asp Tyr Val Tyr Lys Thr Arg Leu Ala Arg Phe
          100   105   110

Lys Leu Ser Asn Asp Phe Asp Arg Val His His Gly His
          115   120   125

<210> 1492
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)

1562

```
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1492
Arg Pro Thr Arg Pro Ala Leu Ser Ile Ile Ala Leu Glu Ile Gln Ala
 1               5                  10                  15

Gln Lys Cys Val Glu Leu Thr Glu Gly Ile Glu Cys Leu Gln Thr His
             20                  25                  30

Ser Lys Ile Asn Gly Arg Asp Leu Thr Phe Trp Gln Glu Leu Val Ser
         35                  40                  45

Lys Cys Leu Thr Glu Tyr Ser Ser Lys Gln Ser Gly Ser Xaa Pro Asn
     50                  55                  60

Val Pro Glu Val
 65


<210> 1493
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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1563

<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1493
Glu Glu Ile Gln Lys His Asn His Ser Lys Ser Thr Trp Xaa Asp Pro
 1   5   10   15

Xaa Thr Thr Arg Cys Thr Asn Leu Thr Lys Phe Leu Xaa Glu Ala Ser
            20   25   30

Leu Val Gly Glu Glu Val Leu Arg Gly Thr Ser Leu Glu Val Thr Leu
        35   40   45

Leu Glu Glu Xaa Leu Arg Xaa Val Arg Gly Thr Phe Thr Xaa Xaa Pro
    50   55   60

Lys Gly Lys Leu Phe Pro Lys Thr Phe Xaa
65   70

<210> 1494
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1494
Asp Ala Thr Ser Pro Ile Ile Glu Glu Leu Ile Thr Phe His Asp His
 1   5   10   15

```
Ala Leu Ile Ile Ile Phe Leu Ile Cys Phe Leu Val Leu Tyr Ala Leu
         20                  25                  30

Phe Leu Thr Leu Thr Thr Lys Leu Thr Asn Thr Asn Ile Xaa Asp Ala
         35                  40                  45

Xaa Glu Ile Glu Thr Val
     50
```

<210> 1495
<211> 38
<212> PRT
<213> Homo sapiens

<400> 1495
```
Phe Phe Gly His Pro Glu Val Tyr Ile Leu Ile Leu Pro Gly Phe Gly
 1               5                  10                  15

Ile Ile Ser His Ile Val Thr Tyr Tyr Ser Gly Lys Lys Glu Pro Phe
         20                  25                  30

Gly Tyr Ile Gly Met Val
         35
```

<210> 1496
<211> 46
<212> PRT
<213> Homo sapiens

<400> 1496
```
Ala Phe Tyr His Ser Ser Leu Ala Pro Thr Pro Gln Leu Gly Gly His
 1               5                  10                  15

Trp Pro Pro Thr Gly Ile Thr Pro Leu Asn Pro Leu Glu Val Pro Leu
         20                  25                  30

Leu Asn Thr Ser Val Leu Leu Ala Ser Gly Val Ser Ile Thr
         35                  40                  45
```

<210> 1497
<211> 60
<212> PRT
<213> Homo sapiens

<400> 1497

```
Ala Gln Val Gly Leu Gln Asp Ala Thr Ser Pro Ile Ile Glu Glu Leu
 1               5                   10                  15

Ile Thr Phe His Asp His Ala Leu Ile Ile Ile Phe Leu Ile Cys Phe
                 20              25                  30

Leu Val Leu Tyr Ala Leu Phe Leu Thr Leu Thr Thr Lys Leu Thr Asn
             35              40                  45

Thr Asn Ile Ser Asp Ala Gln Glu Ile Glu Thr Val
     50              55                  60
```

<210> 1498
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1498
```
Thr Tyr Glu Tyr Thr Asp Tyr Gly Gly Leu Ile Phe Asn Ser Tyr Ile
 1               5                   10                  15

Leu Pro Pro Leu Phe Leu Glu Pro Gly Asp Leu Arg Leu Leu Asp Gly
             20              25                  30

Asp Asn Arg Val Val Leu Pro Ile Glu Ala Pro Phe Val
             35              40                  45
```

<210> 1499
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1499
```
His Arg Leu Asp Phe Leu Gln Leu Met Ile Asp Ser Gln Asn Ser Lys
 1               5                   10                  15

Glu Thr Glu Ser His Lys Ala Leu Ser Asp Leu Glu Leu Ala Ala Gln
             20              25                  30

Ser Ile Ile Phe Ile Phe Ala Gly Tyr Glu Thr Thr Ser Ser Val Leu
             35              40                  45
```

```
Ser Phe Thr Leu Tyr Glu Leu Ala Thr His Pro Asp Val Gln Xaa Lys
    50                  55                  60

Leu Gln Lys Gly Asp
 65



<210> 1500
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1500
Arg Leu Thr Ser Thr Ala Cys Ala Glu Ser Trp Asp Glu Leu Thr Leu
 1               5                  10                  15

Ala Arg Xaa Asp Leu Glu Xaa Gln Ile Glu Gly Leu Asn Glu Xaa Ala
                20                  25                  30

Ser Leu Thr
         35



<210> 1501
<211> 126
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1501
Phe Xaa Ala Pro Ser Arg Ile Ser Ala Trp Xaa Gly Pro Pro Ala Ser
 1           5                   10                  15

Thr Pro Ala Ser Thr Met Ser Ile Lys Val Thr Gln Lys Ser Tyr Lys
            20                  25                  30

Xaa Ser Thr Ser Ser Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Asn
        35                  40                  45

Xaa Pro Gly Ser Arg Ile Asn Xaa Ser Xaa Phe Ser Arg Ile Gly Ser
    50                  55                  60

Ser Asn Xaa Xaa Ser Gly Leu Gly Gly Gly Tyr Xaa Gly Ala Ser Xaa
65                  70                  75                  80

Met Xaa Gly Ile Thr Ala Val Thr Val Asn Gln Ser Leu Leu Xaa Pro
            85                  90                  95

Leu Xaa Leu Glu Val Asp Pro Asn Ile Gln Ala Val Arg Thr Gln Glu
            100                 105                 110

Lys Glu Gln Ile Xaa Thr Leu Asn Asn Lys Phe Ala Ser Ser
            115                 120                 125


<210> 1502
<211> 84
<212> PRT
<213> Homo sapiens

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Gln Arg Asn Ser Xaa Gly Ser Arg Thr Xaa Xaa Ser Arg Xaa Xaa Cys
  1               5                  10                  15

Lys Xaa Val Ala Met Phe Ser Trp Asp Pro Xaa Leu Val Xaa Gly Gly
            20                  25                  30

Gly Ala Ser Lys Met Ala Val Ala His Ala Leu Xaa Glu Lys Ser Xaa
            35                  40                  45

Ala Met Asp Trp Cys Gly Asn Asn Gly His Thr Gly Leu Leu Xaa Arg
        50                  55                  60

Ala Leu Xaa Val His Ser Ser Xaa Pro Trp Ile Xaa Lys Leu Trp Gly
 65                  70                  75                  80

Xaa Ser His His


<210> 1503
<211> 70
<212> PRT
<213> Homo sapiens

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<400> 1503
Val Gly Val Leu Gly Leu Asp Leu Trp Gln Val Lys Ser Gly Thr Ile
 1               5                   10                  15


Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu Ala Tyr Ala Glu Glu Phe
            20                  25                  30


Gly Asn Glu Thr Trp Gly Val Thr Lys Ala Ala Glu Lys Gln Met Lys
            35                  40                  45


Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys Glu Glu Glu Glu Asp Lys
        50                  55                  60


Lys Arg Lys Glu Xaa Xaa
 65                 70



<210> 1504
<211> 42
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1572

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<400> 1504
Asn Thr Leu Xaa Tyr Xaa Met Lys Ala Thr Xaa Ile Leu Leu Leu Xaa
 1               5                   10                  15

Ala Gln Leu Ser Trp Ala Gly Pro Phe His Gln Thr Gly Leu Leu Asp
                20                  25                  30

Ser Met Leu Glu His Glu Ala Tyr Xaa Ile
                35                  40


<210> 1505
<211> 72
<212> PRT
<213> Homo sapiens

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<220>
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<400> 1505
Xaa His Xaa Asp Cys Ser Xaa Pro Ile Val Ala Ala Gly Val Gly Glu
 1               5                   10                  15
```

```
        Phe Glu Ala Gly Ile Ser Lys Asn Gly Gln Thr Arg Glu His Ala Leu
                    20                  25                  30


        Leu Ala Tyr Thr Leu Gly Val Lys Gln Leu Ile Val Gly Xaa Asn Lys
                    35                  40                  45


        Met Asp Ser Thr Glu Pro Pro Tyr Ser Gln Lys Arg Tyr Glu Glu Ile
                50                  55                  60


        Xaa Lys Glu Val Ser Thr Tyr Xaa
        65                  70



        <210> 1506
        <211> 23
        <212> PRT
        <213> Homo sapiens

        <400> 1506
        Ala Glu Thr Arg Lys Arg Lys Gly Leu Lys Glu Gly Ile Pro Ala Leu
         1               5                  10                  15


        Asp Asn Phe Leu Asp Lys Leu
                    20



        <210> 1507
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        <212> PRT
        <213> Homo sapiens

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        <400> 1507
        Lys Leu Pro Leu Lys Ala Lys Met Gly Lys Glu Lys Thr His Ile Asn
         1               5                  10                  15


        Ile Val Val Ile Gly His Val Asp Ser Gly Lys Ser Thr Thr Thr Gly
                    20                  25                  30


        His Leu Ile Tyr Lys Cys Gly Gly Ile Asp Lys Arg Thr Ile Glu Lys
                    35                  40                  45


        Phe Glu Lys Glu Ala Ala Glu Met Gly Lys Gly Ser Phe Lys Tyr Ala
                50                  55                  60
```

1574

```
Trp Val Leu Asp Lys Leu Lys Ala Glu Arg Glu Arg Gly Ile Xaa Ile
 65                  70                  75                  80

Gly Tyr Leu Leu Val Glu Ile
                 85
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<210> 1508
<211> 110
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<222> (108)
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<400> 1508
Pro Asp Pro Xaa Ile Phe Ala Pro Pro Ile Ser Ala Pro Pro Pro Ser
 1               5                  10                  15

Ser Gly Thr Arg Asp Arg Ser Gln Arg Ser Leu Asp His Tyr Glu Pro
                 20                  25                  30

Pro Val Gln Pro Arg Gly Pro Cys Pro Arg Ser Phe Glu Leu Leu Val
                 35                  40                  45

Arg Ala Val Gly Ala Ala Ala Ala Asp Ala Ala Arg Ala His Arg
    50                  55                  60
```

1575

```
Gln Arg Trp Ser Cys Arg Cys Cys Val Xaa Arg Ala Ala Leu Pro Phe
 65              70              75              80

Val Tyr Arg Pro Arg Lys Glu Ser Ile Pro Lys Met Ile Ser Asn Xaa
                85              90              95

Gln Val Xaa Ala Ile Gly Pro Thr Val Leu Gln Xaa Gly Lys
           100             105             110
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<210> 1509
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<220>
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1576

<400> 1509
Ser Phe Val Glu Leu Pro Leu Ala Ser Ile Val Ser Leu His Ala Ser
1   5   10   15

Ser Xaa Gly Gly Arg Leu Gln Thr Ser Pro Xaa Pro Ile Gln Xaa Thr
        20   25   30

Pro Pro Lys Asp Thr Cys Ser Pro Xaa Leu Xaa Met Ser Leu Xaa Pro
        35   40   45

Xaa Lys Leu Cys Arg Arg Arg His Gly Pro Trp Tyr
    50   55   .60

<210> 1510
<211> 116
<212> PRT
<213> Homo sapiens

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<400> 1510
Gly Thr Ser Ser Ser Gln Arg Phe Tyr Lys Glu Asn Leu Gly Gln Gly
1   5   10   15

Trp Met Thr Gln Lys His Glu Arg Met Lys Val Tyr Val Pro Thr Gly
        20   25   30

Phe Ser Ala Phe Pro Phe Glu Leu Leu His Thr Pro Glu Lys Trp Val
        35   40   45

Arg Phe Lys Tyr Pro Lys Leu Ile Ser Tyr Ser Tyr Met Val Arg Gly

1577

```
         50                    55                    60
Gly His Phe Ala Ala Phe Glu Glu Pro Glu Leu Leu Ala Gln Asp Ile
 65                    70                75                    80

Arg Lys Phe Leu Ser Val Leu Glu Arg His Xaa Xaa Thr Pro Leu Pro
                   85                    90                    95

Pro Leu Ala Thr Ser Pro His Asn Ala Leu Gln Xaa Phe Leu Gly Glu
                  100                   105                   110

Asp Asn Xaa Phe
             115
```

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<210> 1511
<211> 156
<212> PRT
<213> Homo sapiens

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<222> (11)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 1511
Arg Glu Gln Lys Leu Glu Leu His Arg Gly Xaa Gly Arg Ser Arg Thr
  1             5                  10                  15

Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Arg Asp Arg Gly Gly
               20                  25                  30

Phe Pro Pro Arg Gly Pro Arg Gly Ser Arg Gly Asn Pro Ser Gly Gly
               35                  40                  45

Gly Asn Val Gln His Arg Ala Gly Asp Trp Gln Cys Pro Asn Pro Ser
     50                  55                  60

Ile Gly Asp Phe Cys Cys Asp Val Ile Val Cys Arg Gly Cys Gly Asn
 65                  70                  75                  80
```

1578

```
Gln Asn Phe Ala Trp Arg Thr Glu Cys Asn Gln Cys Gly Asp Arg Gly
                85                  90                  95

Arg Gly Gly Pro Gly Gly Met Xaa Gly Gly Arg Gly Gly Leu Met Asp
            100             105             110

Arg Gly Gly Pro Gly Gly Met Phe Arg Gly Gly Arg Gly Gly Asp Arg
        115                 120                 125

Gly Gly Phe Arg Gly Gly Arg Gly Met Asp Arg Gly Gly Phe Xaa Gly
    130                 135                 140

Gly Arg Arg Gly Gly Pro Gly Gly Pro Leu Asp Leu
145             150                 155
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<210> 1512
<211> 102
<212> PRT
<213> Homo sapiens

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<400> 1512
Pro Met Arg Arg Pro Arg Gly Glu Pro Ala Pro Gly Pro Arg Asp Arg
 1   5   10   15

Leu Arg Glu Arg Pro Ala Gln Gly Pro Gly Ser His Val Arg Val Ala
            20   25   30

Pro Leu Ala Thr Val Asn Ile Leu Xaa Ser Leu Cys Gln Leu Arg Cys
        35   40   45

Leu Pro Phe Xaa Ala Leu His Phe Val Xaa Ser Pro Gly Phe Ile Xaa
    50   55   60

Tyr Ile Ser Gly Thr Pro His Ala Leu Ile Val Arg Arg Tyr Leu Ser
65   70   75   80

Leu Leu Asp Thr Ala Val Glu Leu Xaa Leu Pro Arg Tyr Arg Gly Pro
            85   90   95

Arg Leu Pro Arg Xaa Gln
            100

<210> 1513
<211> 139
<212> PRT
<213> Homo sapiens

<220>
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<400> 1513
Glu Thr Glu Arg Gly Phe Glu Glu Leu Pro Leu Cys Ser Cys Arg Met
 1   5   10   15

Glu Ala Pro Lys Ile Asp Ser Ile Ser Glu Arg Ala Gly His Lys Cys
            20   25   30

Met Ala Thr Glu Ser Val Asp Gly Glu Leu Ser Gly Cys Asn Ala Ala
        35   40   45

Ile Leu Lys Arg Glu Thr Met Arg Pro Ser Ser Arg Val Ala Leu Met
    50   55   60

Val Leu Cys Glu Thr His Arg Ala Arg Met Val Lys His His Cys Cys
65   70   75   80

Pro Gly Cys Gly Tyr Phe Cys Thr Ala Gly Thr Phe Leu Glu Cys His
                85   90   95

Pro Asp Phe Arg Val Ala His Arg Phe His Lys Ala Cys Val Ser Gln
               100   105   110

Leu Asn Gly Met Val Phe Cys Pro His Cys Gly Glu Asp Thr Ser Glu
               115   120   125

Ala Gln Xaa Val Thr Ile Pro Gly Val Thr Gly
    130   135

<210> 1514
<211> 72
<212> PRT
<213> Homo sapiens

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<400> 1514
Ile Arg His Glu Ser Ile Ser Gly Ala Ser Xaa Lys Asp Ile Val His
 1               5                  10                  15

Ser Gly Xaa Ala Tyr Thr Xaa Glu Xaa Ser Ala Arg Gln Xaa Met Arg
            20                  25                  30

Thr Ala Met Lys Xaa Asn Leu Gly Xaa Asp Leu Arg Thr Ala Ser Tyr
            35                  40                  45

Xaa Asn Ala Ile Xaa Xaa Val Phe Lys Val Tyr Xaa Glu Ala Gly Val
     50                  55                  60

Thr Phe Thr Xaa Met Xaa His Gly
 65                  70
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1582

<210> 1515
<211> 88
<212> PRT
<213> Homo sapiens

<220>
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<222> (82)
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<220>
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<400> 1515
Leu Tyr Pro Pro Ala Cys Ser Ala Thr Arg Thr Pro Ser Thr Met Thr
 1   5   10   15

Thr Ser Ala Ser Ser His Leu Asn Lys Gly Ile Lys Gln Val Tyr Met
             20   25   30

Ser Leu Pro Gln Gly Glu Lys Val Gln Ala Met Tyr Ile Trp Ile Asp
         35   40   45

Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp Ser Glu
     50   55   60

Pro Lys Cys Val Glu Glu Leu Pro Glu Trp Asn Phe Asp Gly Ser Ser
 65   70   75   80

Thr Xaa Gln Ser Xaa Gly Ser Ser
             85

<210> 1516
<211> 105
<212> PRT
<213> Homo sapiens

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<220>
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1583

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<400> 1516
Gly Arg Glu Ser Gln Asp Thr Xaa Phe Xaa Xaa Leu Val Glu Arg Val
 1   5   10   15

Ile Gln Gln Leu Glu Gly Ala Phe Ala Leu Xaa Phe Lys Ser Val His
            20   25   30

Phe Pro Gly Gln Ala Xaa Gly Thr Arg Arg Gly Ser Pro Leu Leu Ile
        35   40   45

Gly Val Arg Ser Glu His Lys Leu Ser Thr Asp His Ile Pro Ile Leu
    50   55   60

Tyr Arg Thr Gly Lys Asp Lys Lys Gly Ser Cys Asn Leu Ser Arg Val
65   70   75   80

```
Asp Ser Thr Thr Cys Leu Xaa Pro Xaa Glu Glu Lys Ala Xaa Glu Tyr
              85                  90                  95

Tyr Phe Ala Ser Asp Ala Xaa Ala Ala
            100             105
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<210> 1517
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<213> Homo sapiens

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<220>
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<220>
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<220>
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<220>
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<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1517
Gly Xaa Glu Lys Arg Glu Arg Glu Arg Leu Val Ile Arg Gln
 1            5            10               15

Xaa Pro Xaa Val Gln Xaa Leu Gln Ala Tyr Lys Pro Arg Glu Asn Asp
            20            25               30

Xaa Leu Ala Leu Glu Lys Ala Asp Val Val Met Val Thr His Gln Ser
            35            40               45

Ser Ala Arg Leu Ala Gly Gly Arg Glu Ala Leu Arg Arg Gly Ala Arg
     50            55            60

Leu Val Ser Cys Asp Ser Xaa Xaa Ser Ser Phe Pro Thr Gln Arg Ser
 65            70            75               80

Val Thr Gln Asn Leu Lys Gly Ser Phe Ile Glu Cys Lys Thr Cys Gln
            85            90               95

Thr Thr Ala Xaa Gly Asn Ser Lys Pro Xaa Phe Ser Xaa Xaa Glu Gly
            100           105              110

Val Phe Val Ser Trp Lys Asn Lys Leu
            115           120


<210> 1518
<211> 146
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1518
Arg Gly Pro Ala Gln Arg Gly Glu Gly Ala Arg Glu Ala Asn Lys Lys
 1               5                  10                  15

Ile Glu Lys Gln Leu Gln Lys Asp Lys Gln Val Tyr Arg Ala Thr His
            20                  25                  30

Arg Leu Leu Leu Leu Gly Ala Gly Glu Ser Gly Lys Ser Thr Ile Val
        35                  40                  45

Lys Gln Met Arg Ile Leu His Val Asn Gly Phe Asn Gly Asp Ser Glu
    50              55                  60

Lys Ala Thr Lys Val Gln Xaa Ile Lys Asn Asn Leu Lys Glu Ala Ile
65              70                  75                  80

Glu Thr Ile Val Ala Ala Met Ser Asn Leu Val Pro Pro Val Glu Leu
                85                  90                  95

Ala Asn Pro Glu Asn Gln Phe Arg Val Asp Tyr Ile Leu Ser Val Met
            100                 105                 110

Asn Val Pro Asp Phe Xaa Phe Pro Pro Glu Phe Tyr Glu His Ala Lys
        115                 120                 125

Ala Leu Trp Xaa Asp Glu Xaa Val Arg Xaa Cys Tyr Glu Arg Ser Asn
    130                 135                 140
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1587

Glu Tyr
145

<210> 1519
<211> 137
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1519
Asp Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly Val Ile Ala Gly Leu
  1   5   10   15

Asn Val Leu Arg Ile Ile Asn Glu Pro Thr Ala Ala Ala Ile Ala Tyr
                20   25   30

Gly Leu Asp Arg Thr Gly Lys Gly Glu Arg Asn Val Leu Ile Phe Asp
                35   40   45

Leu Gly Gly Gly Thr Phe Asp Val Ser Ile Leu Thr Ile Asp Asp Gly
     50   55   60

Ile Phe Glu Val Lys Ala Thr Xaa Gly Asp Thr His Leu Gly Gly Glu
 65   70   75   80

Asp Phe Asp Asn Arg Leu Val Asn His Phe Val Glu Glu Phe Lys Arg
                85   90   95

Lys His Lys Lys Asp Ile Ser Gln Asn Lys Arg Ala Val Arg Arg Leu
                100   105   110

Arg Thr Ala Ala Arg Gly Pro Arg Gly Pro Cys Arg Pro Ala Pro Arg
                115   120   125

Pro Ala Trp Arg Ser Thr Ser Leu Phe
                130   135

<210> 1520
<211> 100
<212> PRT
<213> Homo sapiens

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1520
Cys Arg Lys Ser Ser Trp Lys Arg Trp Trp Pro Gln Ser Lys Leu Xaa
 1               5                  10                  15

Thr Arg Xaa Ile Val Thr Ile Gly Ile Lys Ala Met Ala Thr Met Asp
            20                  25                  30

Ile Thr Ala Lys Val Thr Val Val Met Glu Asp Met Xaa Tyr Thr Gly
            35                  40                  45

Tyr Asn Asn Tyr Tyr Gly Tyr Gly Asp Tyr Ser Asn Gln Gln Ser Gly
     50                  55                  60

Tyr Gly Lys Val Ser Arg Arg Gly Gly His Gln Asn Ser Tyr Lys Pro
 65                  70                  75                  80

Tyr Leu Asn Tyr Ser Ile Cys Asn Leu Ser Pro Thr Gly Gly Glu Ala
                 85                  90                  95

Tyr Phe Xaa Ile
            100




<210> 1521
<211> 129
<212> PRT
<213> Homo sapiens

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<400> 1521
Asp Ala Trp Ala Leu Ala Pro Gly Pro Val Leu Phe Ser Asn Met Val
  1           5               10              15

Cys Leu Lys Phe Pro Gly Ser Ser Cys Met Ala Ala Leu Thr Val Thr
             20              25              30

Leu Met Val Leu Asn Ser Pro Leu Ala Leu Ala Gly Asp Thr Arg Pro
             35              40              45

Arg Phe Leu Glu Gln Val Lys His Glu Cys His Phe Phe Asn Gly Thr
     50              55              60

Glu Arg Val Arg Phe Leu Asp Xaa Tyr Phe Tyr His Gln Glu Glu Tyr
 65              70              75              80

Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Xaa Leu
             85              90              95

Gly Arg Pro Asn Ser Glu Tyr Trp Asn Ser Gln Lys Asp Xaa Xaa Asp
            100             105             110

Arg Ser Gly Pro Arg Trp Thr Pro Thr Ala Xaa Thr Leu Arg Gly Trp
            115             120             125

Val
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1590

<210> 1522
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<212> PRT
<213> Homo sapiens

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<220>
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<400> 1522
Xaa Xaa Thr Asp Ser Xaa Arg Pro Asp Ser Arg Val Asp Pro Arg Val
  1           5               10                  15

Arg Glu Val Thr Asp Tyr Ala Ile Ala Arg Arg Ile Val Asp Leu His
           20              25              30

Ser Arg Ile Glu Glu Ser Ile Xaa Asn Ile Tyr Xaa Leu Asp Asp Ile
           35              40              45

Arg Arg Tyr Leu Xaa Tyr Ala Arg Lys Xaa Lys Pro Lys Asn Ser Lys
     50              55              60

Xaa Ser Xaa Asp Phe Ile Val Glu Gln Xaa Lys His Leu Arg Pro Xaa
65              70              75              80

Asp Gly Phe Trp Ser Ser Pro Val Phe Xaa Glu Gly Xaa Ser Cys Gly
               85              90              95

Xaa Ile Glu Gly Leu Gly Ser Val Ser Leu Gly Ser Gln Xaa Leu Arg
```

1592

```
                  100                105                110

Val
```

```
<210> 1523
<211> 32
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1523
Pro Cys Lys Gly Ser Ile Ile Thr Trp Ser Leu Ile Arg Asp Leu Xaa
 1               5                10                15

Glu Trp Leu His Glu Gly Gln Leu Ala Leu Thr Phe Asn Gln Xaa Asn
            20                25                30
```

```
<210> 1524
<211> 28
<212> PRT
<213> Homo sapiens

<400> 1524
Pro Cys Lys Gly Ser Ile Ile Thr Cys Ser Leu Asn Arg Asp Leu Tyr
 1               5                10                15

Glu Trp Leu His Glu Gly Ser Ala Val Ser Tyr Phe
            20                25
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<210> 1525
<211> 92
<212> PRT
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<213> Homo sapiens

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<400> 1525
Xaa Glu Gln Lys Leu Xaa Leu His Arg Gly Gly Gly Arg Ser Arg Thr
1   5   10   15

1594

```
Ser Gly Ser Pro Xaa Leu Xaa Glu Phe Gly Thr Ser Gly Thr Arg Pro
            20              25              30

Cys Gly Val Tyr Thr Pro Arg Cys Gly Ser Gly Leu Leu Cys Tyr Pro
            35              40              45

Pro Arg Gly Val Glu Lys Pro Leu His Thr Leu Met His Gly Gln Gly
    50              55              60

Val Cys Met Glu Leu Ala Xaa Ile Glu Ala Xaa Xaa Glu Ser Leu Xaa
65              70              75              80

Pro Ser Asp Lys Asp Glu Gly Asp His Pro Asn Xaa
                85              90
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<210> 1526
<211> 154
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1526

```
Xaa Glu Pro Ser Pro Gly Ile Phe Arg Trp Phe His Leu Val Asn Arg
1               5               10              15

Thr Glu Gln Arg Glu Leu Thr Met Glu Phe Gly Leu Ser Trp Leu Phe
            20              25              30

Leu Val Ala Ile Leu Lys Gly Val Gln Cys Glu Val Gln Leu Val Glu
            35              40              45

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
    50              55              60

Thr Val Ser Gly Phe Thr Phe Arg Asn Tyr Ala Met Ser Trp Val Arg
65              70              75              80

Gln Gly Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Asp Gly Ser
            85              90              95
```

1595

```
Gly Tyr Asn Thr Tyr Tyr Glu Arg Ser Leu Gln Gly Arg Phe Ser Val
            100                     105                 110

Ser Arg Asp Asn Ser Xaa Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
            115                 120                 125

Gly Ala Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Lys Thr Glu Arg Met
    130                 135                 140

Gly Thr Gly Trp Tyr Gly Arg Asn Asp Tyr
145                 150
```

```
<210> 1527
<211> 135
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1527
Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp
    1               5               10                  15

Pro Arg Val Arg Thr Val Thr Pro Gly Glu Thr Ala Ser Ile Ser Cys
            20                  25                  30

Arg Ser Ser Gln Thr Leu Leu His Val Asn Gly His Asn Tyr Leu Asp
            35                  40                  45

Trp Tyr Met Gln Lys Pro Gly Gln Pro Pro Gln Leu Val Val Tyr Arg
    50                  55                  60
```

```
Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Gly Gly
65              70              75              80

Ser Gly Thr Asp Phe Thr Leu Arg Ile Thr Thr Val Glu Ala Xaa Asp
            85              90              95

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Ser Pro Tyr Thr Phe
            100             105             110

Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Gly Cys Thr Ile
        115             120                 125

Xaa Leu His Leu Xaa Xaa Ile
    130             135
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```
<210> 1528
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1528
Arg Glu Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr
  1           5               10              15

Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Gly Trp Ala Leu
            20              25              30

Arg Ile Ser Arg Phe Leu Pro Gly Phe His Ser Phe Ala Pro Cys Thr
        35              40              45

Val Ala Pro Ser Leu Arg Ala Gln Pro Ala Lys Gln Arg Ala Pro Val
    50              55              60

Ala Gly Val Met Gln Arg Ala Arg Pro Thr Leu Trp Ala Ala Ala Leu
65              70              75              80

Thr Leu Leu Val Leu Leu Arg Gly Pro Pro Val Ala Arg Ala Gly Ala
            85              90              95
```

```
Ser Ser Gly Gly Leu Gly Pro Val Val Arg Cys Glu Pro Cys Asp Ala
            100             105             110

Arg Ala Leu Ala Xaa Cys Ala Pro Ser Ala Arg Arg Val Arg Arg Asn
            115             120             125

Leu Val Arg Gln Ala Gly Leu Ala Xaa Ala Ala
            130             135
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```
<210> 1529
<211> 135
<212> PRT
<213> Homo sapiens

<400> 1529
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ile Asp Asp Thr Asn
  1             5              10              15

Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu Glu
            20              25              30

Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu Gln
            35              40              45

Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro Lys
  50              55              60

Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr Asp
  65              70              75              80

Glu Leu Ala Arg Lys Asn Arg Glu Glu Leu Asp Lys Tyr Trp Ser Gln
                85              90              95

Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu Val
            100             105             110

Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln Ser
            115             120             125

Leu Glu Ile Asp Leu Gly Leu
            130             135
```

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<210> 1530
<211> 132
<212> PRT
<213> Homo sapiens
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<400> 1530
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Gln Val Pro Ala Arg
 1   5   10   15

Lys Lys Arg Pro Lys Arg Leu Arg Thr Gly Asn Met Val Arg Ser Gly
            20   25   30

Asn Lys Ala Ala Val Val Leu Cys Met Asp Val Gly Phe Thr Met Ser
        35   40   45

Asn Ser Ile Pro Gly Ile Glu Ser Pro Phe Glu Gln Ala Lys Lys Val
    50   55   60

Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala Glu Asn Lys Asp Glu
65   70   75   80

Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr Asp Asn Pro Leu Ser
                85   90   95

Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His Arg His Leu Met Leu
            100   105   110

Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Lys Gln Asn Pro Thr Arg
            115   120   125

Phe Ser Thr Gly
    130

<210> 1531
<211> 94
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<400> 1531
Arg Lys Arg Leu Lys Gly Glu Glu Gln Lys Leu Leu Arg Asn Ala Arg
 1           5               10                  15

Arg Xaa Gln Lys Met Ala Cys Gln Met Thr Xaa Asn His Ser Ser Val
        20                  25                  30

Ser Xaa Leu Lys Gly Ser Ser Leu Gln Asp Arg Arg Ala Ser Arg Phe
        35              40                  45

Leu Ile Lys Ser Val Gln Lys Ser Ser Gly Val Gln Xaa Asp Pro Ser
    50              55                  60

Ser Ser Ile Ser Xaa Pro Ser Leu Thr Ala Xaa Trp Ser Xaa Leu Pro
65              70                  75                  80

Trp His Leu Arg Gly Pro Lys Ala Ala Lys Thr Leu Lys Xaa
                85                  90


<210> 1532
<211> 153
<212> PRT
<213> Homo sapiens
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1600

<400> 1532
Gln Thr Thr Met Cys Tyr Gly Lys Cys Ala Arg Cys Ile Gly His Ser
  1   5   10   15

Leu Val Gly Leu Ala Leu Leu Cys Ile Ala Ala Asn Ile Leu Leu Tyr
             20   25   30

Phe Pro Asn Gly Glu Thr Lys Tyr Ala Ser Glu Asn His Leu Ser Arg
         35   40   45

Phe Val Trp Phe Phe Ser Gly Ile Val Gly Gly Gly Leu Leu Met Leu
         50   55   60

Leu Pro Ala Phe Val Phe Ile Gly Leu Glu Gln Asp Asp Cys Cys Gly
 65   70   75   80

Cys Cys Gly His Glu Asn Cys Gly Lys Arg Cys Ala Met Leu Ser Ser
                 85   90   95

Val Leu Ala Ala Leu Ile Gly Ile Ala Gly Ser Gly Tyr Cys Val Ile
            100   105   110

Val Ala Ala Leu Gly Leu Ala Glu Gly Pro Leu Cys Leu Asp Ser Leu
            115   120   125

Gly Gln Trp Asn Tyr Thr Phe Ala Ser Thr Glu Gly Gln Val Pro Ser
            130   135   140

Gly Tyr Leu His Met Val Arg Val His
145   150

<210> 1533
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1533
Leu Cys Leu Leu Arg Thr Thr Val Thr Glu Val Ser Arg Ala Phe Ser
  1   5   10   15

Leu Leu Cys Lys Met Ala Thr Leu Lys Glu Lys Leu Ile Ala Pro Val
             20   25   30

Ala Glu Glu Glu Ala Thr Val Pro Asn Asn Lys Ile Thr Val Val Gly
         35   40   45

Val Gly Gln Val Gly Met Ala Cys Ala Ile Ser Ile Leu Gly Lys Ser
         50   55   60

```
Leu Ala Asp Glu Leu Ala Leu Val Asp Val Leu Glu Asp Lys Leu Lys
65              70              75              80

Gly Glu Met Met Asp Leu Gln His Gly Ser Leu Phe Leu Gln Thr Pro
                85              90              95

Lys Ile Leu Ala Asp Lys Asp Tyr Ser Val Thr Ala Asn Ser Lys Ile
            100             105             110

Val Val Val Thr Ala Gly Val Arg Gln Gln Glu Gly Glu Ser Arg Leu
        115             120             125

Asn Leu Val Gln Arg Asn Val Asn Val Phe Lys Phe Ile Ile
    130             135             140
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<210> 1534
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1534
```
Ala His Cys His Ala Pro Pro Thr Thr Ala Arg Arg Ala Phe Pro Ile
1               5               10              15

Pro Phe Gly Ser Lys Ser Asn Met Ala Thr Leu Lys Asp Gln Leu Ile
            20              25              30

Tyr Asn Leu Leu Lys Glu Glu Gln Thr Xaa Gln Asn Lys Ile Thr Xaa
        35              40              45
```

Val Gly Val Gly Ala Xaa Gly Met Ala Cys Ala Ile Xaa Ile Leu Met
     50   55   60

Lys Asp Leu
  65

<210> 1535
<211> 72
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1535
Xaa Lys Lys Tyr Leu Gly Asp Xaa Ile Glu Gly Thr Pro Ala Gly Thr
  1   5   10   15

Gly Pro Glu Phe Pro Gly Leu Leu Thr Cys Leu Leu Gln Leu Ile Met
             20   25   30

Val Thr Asn Lys Ala Ile Ala Ser Gln Ile Ser Gln Ile Lys His Phe
             35   40   45

Phe His Cys Ile Leu Val Val Val Cys Pro Asn Ser Ser Met Tyr Leu
     50   55   60

Ile Met Ser Gly Ser Ile Leu His
  65   70

<210> 1536
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<400> 1536
Gly Lys Ala Trp Gly Ser Glu Cys Glu Lys Cys Pro Leu Pro Gly Thr
 1               5                  10                  15


Glu Ala Phe Xaa Glu Ile Cys Pro Ala Gly His Gly Tyr Thr Tyr Ala
                20              25                  30


Ser Ser Asp Ile Arg Leu Ser Met Arg Lys Ala Glu Xaa Glu Glu Leu
            35              40                  45


Ala Xaa Pro Pro Arg Glu Gln Gly Gln Xaa Ser Ser Trp Ala Leu Pro
        50              55                  60


Gly Pro Thr Xaa Lys Gln Pro Leu Arg Val Arg His Gly His Leu Ala
65              70                  75                  80


<210> 1537
<211> 137
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
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1604

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<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1537
Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met
 1               5                  10                  15

Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser
            20                  25                  30

Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser
            35                  40                  45

Ser Pro Asn Cys Ala Pro Glu Cys Asn Xaa Pro Glu Ser Tyr Pro Ser
    50                  55                  60

Ala Met Tyr Cys Asp Glu Leu Lys Leu Xaa Ser Val Pro Met Val Pro
65                  70                  75                  80

Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile
                85                  90                  95

Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu
            100                 105                 110

Asp His Asn Leu Leu Glu Asn Ser Lys Xaa Lys Gly Arg Val Phe Ser
        115                 120                 125
```

```
Lys Leu Lys Gln Leu Xaa Lys Xaa Xaa
    130                 135
```

<210> 1538
<211> 144
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1538

```
Tyr Gln Val Tyr Ser Lys Ile Gln Ala Thr Asn Thr Trp Leu Phe Leu
  1               5                  10                  15

Ser Ser Cys Asn Gly Asn Glu Thr Ser Leu Trp Asp Cys Lys Asn Trp
            20                  25                  30

Gln Trp Gly Gly Leu Thr Cys Asp His Tyr Glu Glu Ala Lys Ile Thr
        35                  40                  45

Cys Ser Ala His Arg Glu Pro Arg Leu Val Gly Gly Asp Ile Pro Cys
    50                  55                  60

Ser Gly Arg Val Glu Val Lys His Gly Asp Thr Trp Gly Ser Ile Cys
65                  70                  75                  80

Asp Ser Asp Phe Ser Leu Glu Ala Ala Ser Val Leu Cys Arg Glu Leu
                85                  90                  95

Gln Cys Gly Thr Val Val Ser Ile Leu Gly Gly Ala His Phe Gly Glu
            100                 105                 110

Gly Met Asp Arg Ser Gly Leu Lys Asn Ser Ser Val Glu Gly His Glu
            115                 120                 125

Ser Pro Ser Phe Ile Xaa Pro Val Xaa Thr Pro Pro Lys Arg Asn Leu
    130                 135                 140
```

1606

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<210> 1539
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1539
Asn Met Ala Gly Val Glu Glu Val Ala Ala Ser Gly Ser His Leu Asn
 1               5                  10                  15


Gly Asp Leu Asp Pro Asp Asp Arg Glu Glu Gly Ala Ala Ser Thr Ala
            20                  25                  30


Glu Glu Xaa Ala Lys Lys Lys Arg Arg Lys Lys Lys Lys Ser Lys Gly
            35                  40                  45


Pro Ser Ala Gly Lys Glu Ser Phe Met Phe Ser Gln Ser Pro Pro Gly
    50                  55                  60


Thr Ala Glu Leu Phe Gly Ser Gly Pro Leu Arg Gly Pro Gly Pro Gly
65                  70                  75                  80


Pro Gln Ser Pro Asp
                85



<210> 1540
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (22)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1540
Gly Val Gly Phe Arg Glu Gly Thr Xaa Gly Ala Gln Thr Gln Arg Ile
 1   5   10   15

Arg Xaa Arg Val Pro Xaa Asn Trp Lys Met Xaa Phe Glu Pro Ile Ser
            20   25   30

Ser Thr Lys Phe
        35

<210> 1541
<211> 144
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (21)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

1608

<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1541
Arg Thr Xaa Ala Xaa Gly Glu Arg Ala Cys Arg Ser Thr Leu Val Asp
 1   5   10   15

Pro Lys Xaa Val Xaa Thr Val Phe Ser Leu Gly Ala Cys Met Glu Gly
            20   25   30

Leu Asn Ile Leu Leu Asn Arg Leu Leu Gly Ile Ser Leu Tyr Ala Glu
            35   40   45

Gln Pro Ala Lys Gly Glu Val Trp Ser Glu Asp Val Arg Lys Leu Ala
        50   55   60

Val Val His Glu Ser Glu Gly Leu Leu Gly Tyr Ile Tyr Cys Asp Phe
65   70   75   80

Phe Gln Arg Ala Asp Lys Pro His Gln Asp Cys His Phe Thr Ile Arg
                85   90   95

Gly Gly Arg Leu Lys Gly Arg Trp Glu Thr Xaa Gln Leu Pro Val Val
            100   105   110

Ser Ser Tyr Ala Gly Ile Phe Pro Val Pro Xaa Arg Glu Phe Ser Asn
            115   120   125

Phe Gly Xaa Xaa Leu Gly Met Met Gly Lys Pro Phe Pro Gly Xaa Gly
    130   135   140

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<210> 1542
<211> 145
<212> PRT
<213> Homo sapiens

<220>
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<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1542
Ala Glu Arg Thr Pro Cys Arg Arg Pro Ala Glu Met Leu Arg Leu Pro
 1               5                  10                  15

Thr Val Phe Arg Gln Met Arg Pro Val Ser Arg Val Leu Ala Pro His
            20                  25                  30

Leu Thr Arg Ala Tyr Ala Lys Xaa Val Lys Phe Gly Ala Asp Ala Arg
        35                  40                  45

Ala Leu Met Leu Gln Gly Val Asp Leu Leu Ala Asp Ala Val Ala Val
    50                  55                  60

Thr Met Gly Pro Lys Gly Arg Thr Val Ile Ile Glu Gln Ser Trp Gly
65                  70                  75                  80

Ser Pro Lys Val Thr Lys Asp Gly Val Thr Val Ala Lys Ser Ile Asp
                85                  90                  95

Leu Lys Asp Lys Tyr Lys Asn Ile Gly Ala Lys Leu Val Gln Asp Val
            100                 105                 110

Ala Asn Asn Thr Asn Glu Glu Ala Gly Asp Gly Thr Thr Thr Ala Thr
        115                 120                 125

Val Leu Ala Arg Ser Ile Ala Lys Glu Gly Phe Glu Lys Ile Ser Lys
    130                 135                 140

Gly
145



<210> 1543
<211> 135
<212> PRT
<213> Homo sapiens

<400> 1543
Lys Phe Gly Ala Asp Ala Arg Ala Leu Met Leu Gln Gly Val Asp Leu
 1               5                  10                  15
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Leu Ala Asp Ala Val Ala Val Thr Met Gly Pro Lys Gly Arg Thr Val
         20              25              30

Ile Ile Glu Gln Ser Trp Gly Ser Pro Lys Val Thr Lys Asp Gly Val
         35              40              45

Thr Val Ala Lys Ser Ile Asp Leu Lys Asp Lys Tyr Lys Asn Ile Gly
     50              55              60

Ala Lys Leu Val Gln Asp Val Ala Asn Asn Thr Asn Glu Glu Ala Gly
 65              70              75              80

Asp Gly Thr Thr Thr Ala Thr Val Leu Ala Arg Ser Ile Ala Lys Glu
             85              90              95

Gly Phe Glu Lys Ile Ser Lys Gly Ala Asn Pro Val Glu Ile Arg Arg
         100             105             110

Gly Val Met Leu Ala Val Asp Ala Val Ile Ala Glu Leu Lys Lys Gln
         115             120             125

Ser Lys Pro Val Thr Thr Pro
     130             135
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<210> 1544
<211> 84
<212> PRT
<213> Homo sapiens

<220>
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<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1544
Cys Glu Phe Lys Arg Val Pro Gln Cys Pro Ser Gly Arg Val Tyr Val
 1   5   10   15

Leu Lys Phe Lys Ala Gly Ser Lys Arg Leu Phe Phe Trp Met Gln Glu
            20   25   30

Pro Lys Thr Asp Gln Asp Glu Glu His Cys Arg Lys Val Asn Glu Leu
            35   40   45

Ser Gly Thr Thr Pro Arg Cys Leu Gly His Trp Gly Pro Ala Glu Gln
    50   55   60

Arg Pro Arg Xaa Leu Cys Ala Xaa Arg Leu Arg Trp Xaa Ala Glu Xaa
65   70   75   80

Ala Gly Glu Thr

<210> 1545
<211> 22
<212> PRT
<213> Homo sapiens

<400> 1545
Tyr Leu Arg Leu Ile Tyr Ser Thr Ser Ile Thr Leu Leu Pro Ile Ser
 1   5   10   15

Asn Asn Val Lys Ile Lys
            20

<210> 1546
<211> 112
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<220>
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<222> (51)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
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<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1546
Pro Ser Ala Ala Ala Gly Asp Leu Gln Arg Thr Ala Ala Met Gly Ala
 1               5                  10                  15

His Leu Val Arg Arg Tyr Leu Gly Asp Ala Ser Val Xaa Pro Asp Pro
            20                  25                  30

Leu Gln Met Pro Thr Phe Pro Pro Asp Tyr Gly Phe Pro Glu Arg Lys
            35                  40                  45

Xaa Arg Xaa Met Val Ala Thr Xaa Xaa Xaa Met Met Asp Ala His Xaa
    50                  55                  60

Ser Ser Xaa Cys Gly Xaa Thr Ala Pro Thr Asn Ser Ser Gly Cys Ser
65                  70                  75                  80

Ile Xaa Thr Leu Xaa Leu Pro Pro Leu Pro Trp Leu Ala Asn Gln Glu
            85                  90                  95

Arg Asp Lys Xaa Glu Xaa Xaa Gln Thr Pro Xaa Xaa Phe Xaa Xaa Pro
            100                 105                 110
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<210> 1547
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1547
Lys Val Ser Ala Val Met Ala Phe Leu Ala Ser Gly Pro Tyr Leu Thr
 1   5   10   15

His Gln Gln Lys Val Leu Arg Leu Tyr Lys Arg Ala Leu Arg His Leu
                20   25   30

Glu Ser Trp Cys Val Gln Arg Asp Lys Tyr Arg Tyr Phe Ala Cys Leu
            35   40   45

Met Arg Ala Arg Phe Glu Glu His Lys Asn Glu Lys Asp Met Ala Lys
        50   55   60

Ala Thr Gln Leu Leu Lys Glu Ala Glu Glu Glu Phe Trp Tyr Arg Gln
65   70   75   80

His Pro Gln Pro Tyr Ile Phe Pro Asp Ser Pro Gly Gly Thr Ser Tyr
                85   90   95

Glu Arg Tyr Asp Cys Tyr Lys Val Pro Glu Trp Cys Leu Asp Asp Trp
            100   105   110

His Pro Ser Glu Lys Ala Met Tyr Pro Asp Tyr Phe Ala Lys Arg Glu
            115   120   125

Gln Trp Lys Lys Leu Arg Glu Gly Lys Leu Gly Thr Arg Gly
        130   135   140

<210> 1548
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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1616

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1548
Leu Tyr Tyr Xaa Leu Gly Phe Leu Xaa Leu Xaa Xaa Arg Leu Pro Leu
 1               5               10              15

Asp Ala Ala Lys Arg Xaa His Asp Glu Leu Gly Asn Glu Arg Pro Xaa
            20              25              30

Ala Tyr Met Xaa Glu His Asn Gln Leu Asn Gly Trp Xaa Ser Asp Glu
        35              40              45

Asn Asp Trp Asn Glu Lys Leu Tyr Pro Val Trp Lys Arg Xaa Asp Met
    50              55              60

Xaa Xaa Glu Lys Leu Leu Glu Gly Arg Pro Val Cys Lys Ala Val Leu
65              70              75              80

Thr Xaa Asp Xaa Pro Thr Leu Gly Gly Leu Lys Xaa Asn Ile Xaa Arg
            85              90              95

Xaa Thr
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<210> 1549
<211> 138
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
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<220>
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<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1549
Gly Cys Ser Leu Glu Gln Arg Ser Phe Ile Ser Val Arg Leu Leu Ser
 1               5                  10                  15

Tyr Leu Ser Ala Cys Arg His Pro Met Glu Asp Ser Met Asp Met Asp
                20                  25                  30

Met Ser Pro Leu Arg Pro Gln Asn Tyr Leu Phe Gly Cys Glu Leu Lys
            35                  40                  45

Ala Asp Lys Asp Tyr His Phe Lys Val Asp Asn Xaa Glu Asn Glu His
        50                  55                  60

Gln Leu Ser Leu Arg Thr Val Xaa Xaa Gly Ala Gly Ala Lys Asp Glu
    65                  70                  75                  80
```

```
    Leu His Ile Val Glu Ala Glu Ala Met Asn Tyr Glu Gly Ser Pro Ile
                    85                  90                  95

    Lys Val Thr Leu Ala Thr Leu Lys Met Ser Val Gln Pro Thr Val Phe
                   100                 105                 110

    Pro Leu Gly Ala Leu Asn Asn Thr Thr Xaa Xaa Leu Lys Val Glu Xaa
                   115                 120                 125

    Trp Phe Arg Ala Met Pro Ile Xaa Gly Gln
           130                 135
```

<210> 1550
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1550

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    Thr Leu Ala Phe Phe Leu Ile Pro Cys Ile Gly Ser Pro Ala Cys Pro
     1               5                  10                  15

    Thr Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys
                    20                  25                  30

    Asp Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Met Glu Glu
                35                  40                  45

    Thr Pro Cys
           50
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<210> 1551
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1551
Lys Ala Xaa Ser Val Xaa Leu Tyr Lys Val Arg Leu Gln Val Pro Val
 1   5   10   15

Arg Asn Ser Arg Val Asp Pro Arg Val Arg Xaa Gly Gly Glu Gln Val
             20   25   30

Ser Ser Thr Ile Xaa Gly Leu Ser Gly Pro Pro Ser Arg Arg Gly Pro
         35   40   45

Phe Pro Leu Ala Trp Val Ile Leu Phe Leu Leu Glu Ala Gln Xaa Gly
     50   55   60

Pro Trp Xaa Leu Leu Pro Ser Ala His
 65   70

<210> 1552
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

1620

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1552
Asn Ser Ala Xaa Xaa Glu Leu Leu Thr Gln Pro Gly Asp Trp Thr Leu
 1   5   10   15

Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met Thr Ser Glu Glu Lys
            20   25   30

Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln Asn Ile Ile Leu Tyr
        35   40   45

His Leu His Gln Glu Phe Ser Leu Glu Lys Asp Leu Asn Leu Val Leu
    50   55   60

Leu Thr Phe Leu Lys Thr Thr Gln Gly Ser Lys Ile Phe Leu Glu Gly
 65   70   75   80

```
Ser Glu Met Val Thr Leu Leu Val Asn Gly Phe Gly Asn Pro Lys Xaa
                85                  90                  95

Ser Asp Ile His Gly Pro Pro Xaa Val Val Ile Ser Cys Cys Arg Leu
            100                 105                 110

Asn Xaa Xaa Phe Pro Ala Xaa Thr Pro Phe Gly Xaa Gly Ser Thr Gly
        115                 120                 125

Xaa Asp Thr
    130
```

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<210> 1553
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
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<220>
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<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1553
Trp Ile Xaa Arg Ala Ala Gly Ile Arg His Glu Val Ala Asp Thr Met
  1           5               10                  15

Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu Ser Cys
            20                  25                  30

Leu Met Leu Leu Ser Gln Val Gln Gly Glu Glu Pro Gln Arg Glu Leu
        35                  40                  45

Pro Ser Ala Arg Ile Arg Xaa Pro Lys Gly Ser Lys Ala Tyr Gly Ser
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1622

```
        50                    55                    60

   His Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser Trp Thr Asp Ala Asp
   65                70                75                80

   Leu Ala Cys Gln Lys Arg Pro Ser Gly Asn Leu Val Ser Xaa Leu Ser
                  85                90                95

   Gly Ala Glu Gly Ser Phe Xaa Pro Pro Trp
                  100               105
```

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<210> 1554
<211> 117
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1554
Ala Thr Phe Pro Arg Glu Trp Leu Cys Asp Arg His Leu Arg Glu Lys
 1               5                10                15

Met Phe Ser Ser Val Ala His Leu Ala Arg Ala Asn Pro Phe Asn Thr
                20                25                30

Pro His Leu Gln Leu Val His Asp Gly Leu Gly Asp Leu Arg Ser Ser
           35                40                45

Ser Pro Gly Pro Thr Gly Gln Pro Arg Arg Pro Arg Asn Leu Ala Ala
      50                55                60

Ala Ala Val Glu Glu Gln Tyr Ser Cys Asp Tyr Gly Ser Gly Arg Phe
 65                70                75                80

Phe Ile Leu Cys Gly Leu Gly Gly Ile Ile Ser Cys Gly Thr Thr His
                85                90                95

Thr Ala Leu Val Pro Leu Asp Leu Val Lys Cys Arg Xaa Arg Phe Val
                100               105               110

Phe Ala Cys Trp Thr
           115
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<210> 1555
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<211> 164
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1555
Glu Lys Lys Val Glu Arg Gln Thr Glu Leu Lys Arg Lys Phe Glu Gln
 1   5   10   15

Met Lys Gln Asp Arg Ile Thr Arg Tyr Gln Gly Val Asn Leu Tyr Val
            20   25   30

Lys Asn Leu Asp Asp Gly Ile Asp Asp Glu Arg Leu Arg Lys Glu Phe
            35   40   45

Ser Pro Phe Gly Thr Ile Thr Ser Ala Lys Val Met Met Glu Gly Gly
    50   55   60

Arg Ser Lys Gly Phe Gly Phe Val Cys Phe Ser Ser Pro Glu Xaa Ala
65   70   75   80

Thr Lys Ala Val Thr Xaa Met Asn Gly Arg Ile Val Ala Thr Lys Pro
                85   90   95

Leu Tyr Val Ala Leu Ala Gln Arg Lys Glu Glu Arg Gln Ala His Leu
            100   105   110

Thr Asn Gln Tyr Met Gln Arg Met Ala Ser Val Arg Xaa Val Pro Asn
            115   120   125

Pro Val Ile Asn Pro Tyr Gln Pro Ala Pro Pro Ser Gly Tyr Phe Met
    130   135   140

Ala Ala Ile Pro Gln Thr Gln Asn Val Leu His Thr Ile Leu Leu Ala
145   150   155   160

Lys Leu Leu Asn

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<210> 1556
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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1625

<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1556
Xaa Xaa Leu Thr Leu Thr Xaa Gly Xaa Lys Xaa Xaa Xaa Xaa Thr Ala
 1   5   10   15

Val Ala Ala Ala Leu Ala Thr Ser Gly Ser Pro Gly Pro Val Arg Asn
                 20   25   30

Ser Ala Arg Ala Gly Thr Ser Glu Phe Leu Asn Lys Val Thr Glu Ala
         35   40   45

Gln Glu Asp Gly Gln Ser Thr Ser Glu Leu Ile Gly Gln Phe Gly Val
     50   55   60

Gly Phe Tyr Ser Ala Phe Leu Val Ala Asp Lys Val Ile Val Thr Ser
 65   70   75   80

Lys His Asn Asn Asp Thr Gln His Ile Trp Glu Ser Asp Ser Asn Glu
                 85   90   95

Phe Ser Val Ile Ala Asp Pro Arg Gly Asn Thr Leu Gly Arg Gly Thr
                 100   105   110

Thr Ile Thr Leu Val Leu Lys Glu Glu Ala Ser Asp Tyr Leu Glu Leu
         115   120   125

Asp Thr Ile Lys Asn Leu Val Lys Lys Tyr Ser Gln Phe Ile Asn Phe
     130   135   140

Pro Ile Tyr Val Trp Xaa Ser Lys Thr Glu Thr Val Xaa Glu Pro Met
145   150   155   160

Glu Glu Glu Gly Ala Ala
                165

<210> 1557
<211> 127
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
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<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (103)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<220>
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<220>
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<220>
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<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1557
Xaa Asn Val Val Glu Ala Gln Phe Asp Ser Arg Val Arg Ala Thr Gly
 1   5   10   15

His Ser Xaa Xaa Xaa Tyr Asn Lys Trp Glu Thr Ile Glu Ala Trp Thr
            20   25   30

Gln Gln Val Ala Thr Xaa Asn Pro Ala Leu Ile Ser Arg Ser Val Ile
            35   40   45

Gly Thr Thr Phe Glu Gly Arg Ala Ile Tyr Leu Leu Lys Val Gly Lys
      50   55   60

Ala Gly Gln Asn Lys Pro Ala Ile Phe Met Asp Cys Gly Phe Pro Met
65   70   75   80

Pro Xaa Xaa Trp Ile Ser Pro Cys Ile Xaa Pro Val Gly Phe Xaa Lys
            85   90   95

```
Xaa Ala Val Pro Phe Leu Xaa Thr Phe Xaa Xaa Xaa Leu Thr Asn Phe
            100              105              110

Xaa Asn Asn Leu Xaa Phe Tyr Xaa Pro Ala Leu Trp Pro Gln Tyr
        115              120              125
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<210> 1558
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1558
Lys Ala Gly Ala Ala Ala Gly Gly Pro Gly Val Ser Gly Val Cys Val
  1               5               10              15

Cys Lys Ser Arg Tyr Pro Val Cys Gly Ser Asp Gly Thr Thr Tyr Pro
            20              25              30

Ser Gly Cys Gln Leu Arg Ala Ala Ser Gln Arg Ala Glu Ser Arg Gly
        35              40              45

Glu Lys Ala Ile Thr Gln Val Ser Lys Gly Thr Cys Glu Gln Gly Pro
    50              55              60

Ser Ile Val Thr Pro Pro Lys Asp Ile Trp Asn Val Thr Gly Ala Xaa
65              70              75              80

Val Tyr Leu Ser Cys Glu Val Ile Gly Ile Pro Thr Pro Val Leu Ile
                85              90              95
```

```
Trp Asn Lys Val Xaa Arg Gly His Tyr Gly Xaa Xaa Arg
            100                 105
```

<210> 1559
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1559

```
Gly Leu Arg Gly His Leu Arg Ser Ser Gly Ser Ser Ile Trp Asn Tyr
 1               5               10                  15

Ile Lys Phe Arg Lys His Val Ser Arg Tyr Asp Ser Arg Thr Thr Ile
            20              25                  30

Phe Ser Pro Glu Gly Arg Leu Tyr Gln Val Glu Tyr Ala Met Glu Ala
            35              40                  45

Ile Gly His Ala Gly Thr Cys Leu Gly Ile Leu Ala Asn Asp Gly Val
    50              55                  60

Leu Leu Ala Ala Glu Arg Arg Asn Ile His Lys Leu Leu Asp Glu Val
 65              70                  75                  80

Phe Phe Ser Glu Lys Ile Tyr Lys Leu Asn Glu Asp Met Ala Cys Ser
                85              90                  95

Val Ala Gly Ile Thr Phe
            100
```

<210> 1560
<211> 159
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1560

```
Ser Thr His Ala Ser Ala Ala His Pro Ser Thr Leu Thr His Pro Gln
 1               5               10                  15

Arg Arg Ile Asp Thr Leu Asn Ser Asp Gly Tyr Thr Pro Glu Pro Asp
            20              25                  30
```

```
Lys Pro Arg Pro Met Pro Met Asp Thr Ser Val Tyr Glu Ser Pro Tyr
        35              40              45

Ser Asp Pro Glu Glu Leu Lys Asp Lys Lys Leu Phe Leu Lys Arg Asp
    50              55              60

Asn Leu Leu Ile Ala Asp Ile Glu Leu Gly Cys Gly Asn Phe Gly Ser
65              70              75              80

Val Arg Gln Gly Val Tyr Arg Met Arg Lys Lys Gln Ile Asp Val Ala
            85              90              95

Ile Lys Val Leu Lys Gln Gly Thr Glu Lys Ala Asp Thr Glu Glu Met
            100             105             110

Met Arg Glu Ala Gln Ile Met His Gln Leu Asp Asn Pro Tyr Ile Val
        115             120             125

Arg Leu Ile Gly Val Cys Gln Ala Glu Ala Leu Met Leu Val Met Glu
    130             135             140

Met Xaa Gly Ala Gly Ala Ala Gln Val Pro Gly Arg Gln Glu Gly
145             150             155
```

<210> 1561
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1561
```
Arg Ala His Glu Asn Glu Ile Thr Lys Val Arg Lys Val Thr Phe Asn
1               5               10              15

Gly Leu Asn Gln Met Ile Val Ile Glu Leu Gly Thr Asn Pro Leu Lys
            20              25              30

Ser Ser Gly Ile Glu Asn Gly Ala Phe Gln Gly Met Lys Lys Leu Ser
        35              40              45
```

```
Tyr Ile Arg Ile Ala Asp Thr Asn Ile Thr Ser Ile Pro Gln Gly Leu
    50              55              60

Pro Pro Ser Leu Thr Glu Leu His Leu Asp Gly Asn Lys Ile Ser Arg
65              70              75              80

Val Asp Ala Ala Ser Leu Lys Gly Leu Asn Asn Leu Ala Lys Leu Gly
            85              90              95

Leu Ser Phe Asn Ser Ile Ser Ala Val Asp Asn Gly Ser Leu Ala Asn
            100             105             110

Thr Pro His Leu Arg Glu Leu His Leu Asp Asn Asn Lys Leu Thr Arg
            115             120             125

Val Pro Gly Gly Leu Gln Ser Ile Lys Tyr Xaa Xaa Gly Gly Tyr Leu
    130             135             140

His Asn Asn His Ile Ser Val Val Gly Ser Lys
145             150             155
```

```
<210> 1562
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1562
Xaa Asn Gln Asn Ser Asn Gly Leu Val Phe Leu Leu Trp Gly Ser Tyr
  1               5               10              15

Ala Gln Lys Lys Gly Ser Ala Ile Asp Arg Lys Arg His His Val Leu
            20              25              30

Gln Thr Ala His Pro Ser Pro Leu Ser Val Tyr Arg Gly Phe Phe Gly
        35              40              45

Cys Arg His Phe Ser Lys Thr Asn Glu Leu Leu Gln Lys Ser Gly Lys
    50              55              60

Lys Pro Ile Asp Trp Lys Glu Leu
65              70
```

1632

```
<210> 1563
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1563
Arg Thr Arg Gly Arg Leu Leu Gly His Leu Lys Glu Thr Trp Gly His
 1               5                  10                  15

Pro Arg Arg Ala Ser Trp Val Val Arg Ser Arg Arg Cys Arg His Cys
            20                  25                  30

Leu Cys Phe Met Arg Lys Met Leu Ala Ala Val Ser Arg Val Leu Ser
            35                  40                  45

Gly Ala Ser Gln Lys Pro Ala Ser Arg Val Leu Val Ala Ser Arg Asn
        50                  55                  60

Phe Ala Asn Asp Ala Thr Phe Glu Ile Xaa Lys Cys Asp Leu His Arg
65                  70                  75                  80

Leu Glu Glu Ala Leu Leu Ser Gln Gln Cys Ser Pro Arg Glu Asp Gly
                85                  90                  95

Leu Lys Tyr Tyr Arg Met Met Xaa Thr Val Pro Glu Trp Asn
                100                 105                 110


<210> 1564
<211> 95
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1564
Leu His Ser Xaa Cys Thr Arg Arg Gly Ser Gly Ser Leu Arg Leu Cys
 1               5                  10                  15

Ser Val Ala Arg Val Gly Gln Arg Arg Met Thr Ser Ala Ala Met Ser
            20                  25                  30

Lys Pro His Ser Glu Xaa Gly Thr Ala Phe Ile Gln Thr Gln Xaa Leu
            35                  40                  45

His Ala Xaa Met Ala Asp Thr Phe Leu Glu His Met Xaa Arg Leu Asp
        50                  55                  60
```

```
Ile Asp Ser Pro Pro Xaa Thr Gly Arg Asn Thr Gly Ile Ile Cys Thr
65                  70              75                  80

Ile Gly Pro Ala Ser Arg Ser Xaa Gly Asp Gly Xaa Gly Xaa Asp
            85              90                  95
```

<210> 1565
<211> 50
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1565
```
Pro Thr Met Ala Ala Ile Arg Lys Lys Leu Val Ile Val Gly Asp Gly
 1           5               10                  15

Ala Cys Gly Lys Thr Cys Leu Leu Ile Val Phe Ser Xaa Asp Gln Phe
            20              25                  30

Pro Glu Val Tyr Xaa Pro Thr Val Leu Xaa Glu Leu Tyr Cys Ala His
        35              40                  45

Xaa Gly
    50
```

<210> 1566
<211> 161

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1566
Ala Ala Met Phe Asn Ile Arg Asn Ile Gly Lys Thr Leu Val Thr Arg
 1   5   10   15

Thr Gln Gly Thr Lys Ile Ala Ser Asp Gly Leu Lys Gly Arg Val Phe
            20   25   30

Glu Val Ser Leu Ala Asp Leu Gln Asn Asp Glu Val Ala Phe Arg Lys
            35   40   45

Phe Lys Leu Ile Thr Glu Asp Val Gln Gly Lys Asn Cys Leu Thr Asn
        50   55   60

Phe His Gly Met Asp Leu Thr Arg Asp Lys Met Cys Ser Met Val Lys
65   70   75   80

Lys Trp Gln Thr Met Ile Glu Ala His Val Asp Val Lys Thr Thr Asp
            85   90   95

Gly Tyr Leu Leu Arg Leu Phe Cys Val Gly Phe Thr Lys Lys Arg Asn
            100   105   110

Asn Gln Ile Arg Lys Thr Ser Tyr Ala Gln His Gln Gln Val Arg Gln
            115   120   125

Ile Arg Lys Lys Met Met Glu Ile Met Thr Arg Glu Val Gln Thr Asn
        130   135   140

Asp Leu Lys Glu Val Val Asn Lys Leu Ile Xaa Asp Ala Leu Glu Lys
145   150   155   160

Thr

<210> 1567
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1567
Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg Cys Gly Arg

```
             1                5                        10                      15

         Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Pro
                     20                  25                  30

         Gly Pro Arg Gln Ser Pro Ala Arg Leu Val Ala Met Pro Arg Lys Ile
                     35                  40                  45

         Glu Glu Ile Lys Asp Phe Leu Leu Thr Ala Arg Arg Lys Asp Ala Lys
                 50                  55                  60

         Ser Val Lys Ile Lys Lys Asn Lys Asp Asn Val Lys Phe Lys Val Arg
             65                  70                  75                      80

         Cys Ser Arg Tyr Leu Tyr Thr Leu Val Ile Thr Asp Lys Glu Lys Ala
                         85                  90                      95

         Glu Lys Leu Lys Gln Ser Leu Pro Pro Gly Leu Ala Val Lys Glu Leu
                     100                 105                 110

         Lys
```

<210> 1568
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1568
```
         Gly Cys Asn Tyr Gly Lys Pro Xaa His His Gly Val Asn Gln Leu Lys
             1                5                  10                  15

         Phe Ala Arg Ser Leu Gln Ser Xaa Ala Glu Glu Arg Ala Gly Arg His
                     20                  25                  30
```

```
Xaa Gly Ala Leu Arg Val Leu Asn Ser Tyr Trp Val Gly Glu Asp Ser
         35                  40                  45
```

<210> 1569
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1569
```
Gly Thr Ser Glu Arg Xaa Glu His Ala Met Lys Ala Ser Gly Thr Leu
 1               5                  10                  15

Arg Glu Tyr Lys Val Val Gly Arg Cys Leu Pro Thr Pro Lys Cys His
             20                  25                  30

Thr Pro Pro Leu Tyr Arg Met Arg Ile Phe Ala Pro Asn His Val Val
         35                  40                  45

Ala Lys Ser Arg Phe Trp Tyr Phe Val Ser Gln Leu Lys Lys Met Lys
     50                  55                  60

Lys Ser Ser Gly Glu Ile Val Tyr Cys Gly Gln Val Phe Glu Lys Ser
 65                  70                  75                  80

Pro Leu Arg Val Lys Asn Phe Gly Ile Trp Leu Arg Tyr Asp Ser Arg
                 85                  90                  95

Ser Gly Thr His Asn Met Xaa Arg Glu Xaa Arg Asp Leu Thr Asn Ala
             100                 105                 110
```

1638

```
Gly Ala Val Asn Gln Cys Asn Gly
        115                 120


<210> 1570
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1570
Cys Pro Pro Leu Trp Gln Glu Glu Val Trp Leu Asp Pro Asn Glu Thr
  1           5               10                  15

Asn Glu Ile Ala Asn Ala Asn Ser Arg Gln Gln Ile Arg Lys Leu Ile
            20              25              30

Lys Asp Gly Leu Ile Ile Arg Lys Pro Val Thr Val His Ser Arg Ala
            35              40              45

Arg Cys Arg Lys Asn Thr Leu Ala Arg Arg Lys Gly Xaa His Met Gly
    50              55              60

Ile Val Ser Gly Lys Val Gln Pro Met Pro Glu Cys Gln Xaa Arg Ser
  65              70              75                  80

His Gly Leu Arg Lys
                85



<210> 1571
<211> 135
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 1571
Phe Ala Lys Met Thr Asn Thr Lys Gly Lys Arg Arg Gly Thr Arg Tyr
 1               5                   10                  15

Met Phe Ser Arg Pro Phe Arg Lys His Gly Val Val Pro Leu Ala Thr
            20              25                  30

Tyr Met Arg Ile Tyr Lys Lys Gly Asp Ile Val Asp Ile Lys Gly Met
            35                  40                  45

Gly Thr Val Gln Lys Gly Met Pro His Lys Cys Tyr His Gly Lys Thr
    50                  55                  60

Gly Arg Val Tyr Asn Val Thr Gln His Ala Val Gly Ile Val Val Asn
    65                  70                  75                  80

Lys Gln Val Lys Gly Lys Ile Leu Ala Lys Arg Ile Asn Val Arg Ile
                85                  90                  95

Glu His Ile Lys His Ser Lys Ser Arg Asp Ser Phe Leu Lys Arg Val
            100                 105                 110

Lys Glu Asn Asp Gln Lys Lys Lys Glu Ala Lys Glu Lys Gly Thr Trp
            115                 120                 125

Val Gln Leu Lys Arg Xaa Pro
    130                 135
```

```
<210> 1572
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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1640

<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1572
Thr Ala Thr Pro Ala Asn Xaa Xaa Leu Pro Trp Gly Xaa Lys Lys Xaa
 1   5   10   15

Ala Arg Arg Ser Lys Ile Xaa Ser Phe Val Xaa Val Cys Xaa Tyr Asn
             20   25   30

```
His Leu Met Pro Xaa Arg Tyr Ser Val Xaa Tyr Ser Pro Trp Gly Lys
            35              40              45

Ala Val Arg Ser Leu Gly Cys Leu Pro Xaa Phe Leu Ala Leu Lys Arg
        50              55              60

Xaa Ala Arg Arg Xaa Pro Arg
65              70
```

```
<210> 1573
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1573
Ala Ala Ala Lys Gly Ala Ala Ala Met Ser Ala His Leu Gln Trp Met
 1           5               10              15

Val Val Arg Asn Cys Ser Ser Phe Leu Ile Lys Arg Asn Lys Gln Thr
            20              25              30

Tyr Ser Thr Glu Pro Asn Asn Leu Lys Ala Arg Asn Ser Phe Arg Tyr
            35              40              45

Asn Gly Leu Ile His Arg Lys Thr Val Gly Xaa Glu Pro Xaa Ala Asp
        50              55              60

Gly Lys Xaa Val
65
```

```
<210> 1574
<211> 127
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1574
Gly Arg Met Xaa Pro Ala Lys Lys Gly Gly Glu Lys Lys Lys Gly Arg
 1   5   10   15

Ser Ala Ile Asn Glu Val Val Thr Arg Glu Tyr Thr Ile Asn Ile His
                20   25   30

Lys Arg Ile His Gly Val Gly Phe Lys Lys Arg Ala Pro Arg Ala Leu
            35   40   45

Lys Glu Ile Arg Lys Phe Ala Met Lys Glu Met Gly Thr Pro Asp Val
    50   55   60

Arg Ile Asp Thr Arg Leu Asn Lys Ala Val Trp Ala Lys Gly Ile Arg
65   70   75   80

Asn Val Pro Tyr Arg Ile Arg Val Arg Leu Ser Arg Lys Arg Asn Glu
                85   90   95

Asp Glu Asp Ser Pro Asn Lys Leu Tyr Thr Leu Val Thr Tyr Val Pro
                100   105   110

Val Thr Thr Phe Lys Asn Leu Gln Thr Val Asn Val Asp Glu Asn
            115   120   125

<210> 1575
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1575
Trp Phe Pro Arg Ala Ala Gly Phe Arg His Xaa Xaa Val Gln Ile Arg
 1           5               10              15

Ala Xaa Glu Arg Lys Gly Thr Ser Ser Phe Gly Lys Xaa Arg Asn Lys
        20              25              30

Thr His Thr Leu Cys Arg Arg Xaa Gly Ser Lys Ala Tyr His Leu Gln
        35              40              45

Xaa Ser Thr Cys Gly Lys Phe Gly Tyr Pro Ala Lys Arg Lys Arg Lys
    50              55              60

Xaa Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr Gly Thr Gly
65              70              75              80

Arg Xaa Arg His Leu Lys Phe Val Tyr Arg Arg Phe Arg His Gly Phe
```

1644

```
                     85                    90                    95

Xaa Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala Ala Val Ala Ala Ser
            100                   105                   110

Ser Ser Ser
        115
```

<210> 1576
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1576
```
Gly Arg Arg Ser Glu Met Thr Lys Gly Thr Ser Ser Phe Gly Lys Arg
  1             5                  10                  15

Arg Asn Lys Thr His Thr Leu Cys Arg Arg Cys Gly Ser Lys Ala Tyr
            20                  25                  30

His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro Ala Lys Arg
        35                  40                  45

Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr
    50                  55                  60

Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg Arg Phe Arg
65                  70                  75                  80

His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala Ala Val
                85                  90                  95

Ala Ala Phe Gln Phe Ile Phe Lys Asn Val Asn Xaa Phe Ser His Ala
            100                 105                 110
```

```
Ile Xaa Cys Xaa Gly Val Leu Lys Asn
        115                 120
```

<210> 1577
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1577
```
Gly Ile Val Gly Lys Tyr Gly Thr Arg Tyr Gly Ala Ser Leu Arg Lys
 1               5                 10                15


Met Val Lys Lys Ile Glu Ile Ser Gln His Ala Lys Tyr Thr Cys Ser
            20                25                30


Phe Cys Gly Lys Thr Lys Met Lys Arg Arg Ala Val Gly Ile Trp His
            35                40                45


Cys Gly Ser Cys Met Lys Thr Val Xaa Gly Xaa Ala Xaa
        50                55              60
```

<210> 1578
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1578
Glu Leu Gly Lys Gly Lys Met Glu Lys Pro Ser Pro Tyr Pro Ala Gln
 1               5                   10                  15

Gly Pro Cys Ile Ile Tyr Asn Glu Asp Asn Gly Ile Ile Lys Ala Phe
                20                  25                  30

Gln Lys His Pro Trp Asn Tyr Ser Ala Xaa Met Xaa Ser Lys Leu Lys
            35                  40                  45

His Phe Xaa Ser Leu Leu Pro Gly Gly Ala Cys Gly Asp Val Xaa Gly
        50                  55                  60

Ile Gly Xaa Glu Met Ala Phe Pro Gly Xaa
65                  70


<210> 1579
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1579
Ser Xaa Met Ala Cys Ala Arg Pro Leu Ile Ser Val Tyr Ser Glu Lys
 1               5                  10                  15

Gly Glu Ser Ser Gly Lys Asn Val Thr Leu Pro Ala Val Phe Lys Ala
             20                  25                  30

Pro Ile Arg Pro Asp Ile Val Asn Phe Val His Thr Asn Leu Arg Lys
             35                  40                  45

Asn Asn Arg Gln Pro Tyr Ala Val Ser Glu Leu Ala Gly His Gln Thr
         50                  55                  60

Ser Ala Glu Ser Trp Gly Thr Gly Arg Ala Val Ala Arg Ile Pro Arg
 65                  70                  75                  80

Xaa Arg Gly Gly Gly Thr Xaa Arg Ser Gly Xaa Gly Ala Phe Gly Asn
                 85                  90                  95

Met Cys



<210> 1580
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
```

1648

```
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1580
Leu Ser Leu Xaa Gly Lys Lys Lys Lys Arg Leu Arg Val Asp Lys Trp
 1               5                  10                  15

Trp Gly Xaa Arg Lys Glu Leu Ala Thr Val Arg Thr Ile Cys Ser His
            20                  25                  30

Val Gln Asn Met Ile Lys Gly Val Thr Leu Gly Phe Arg Tyr Lys Met
            35                  40                  45

Arg Xaa Val Tyr Ala His Xaa Pro Ile Asn Val Val Ile Gln Glu Xaa
    50                  55                  60

Gly Ser Ile Val Glu Ile Xaa Xaa
65                  70


<210> 1581
<211> 153
<212> PRT
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<213> Homo sapiens

<400> 1581
Ala Ile Met Gly Arg Met His Ala Pro Gly Lys Gly Leu Ser Gln Ser
 1   5   10   15

Ala Leu Pro Tyr Arg Arg Ser Val Pro Thr Trp Leu Lys Leu Thr Ser
            20   25   30

Asp Asp Val Lys Glu Gln Ile Tyr Lys Leu Ala Lys Lys Gly Leu Thr
        35   40   45

Pro Ser Gln Ile Gly Val Ile Leu Arg Asp Ser His Gly Val Ala Gln
    50   55   60

Val Arg Phe Val Thr Gly Asn Lys Ile Leu Arg Ile Leu Lys Ser Lys
65   70   75   80

Gly Leu Ala Pro Asp Leu Pro Glu Asp Leu Tyr His Leu Ile Lys Lys
            85   90   95

Ala Val Ala Val Arg Lys His Leu Glu Arg Asn Arg Lys Asp Lys Asp
            100   105   110

Ala Lys Phe Arg Leu Ile Leu Ile Glu Ser Arg Ile His Arg Leu Ala
        115   120   125

Arg Tyr Tyr Lys Thr Lys Arg Val Leu Pro Pro Asn Trp Lys Tyr Glu
    130   135   140

Ser Ser Thr Ala Ser Ala Leu Val Ala
145   150

<210> 1582
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1582
Gly Pro Ala Asn Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Ala
 1   5   10   15

Ala Arg Val Ile Ile Glu Lys Tyr Tyr Thr Arg Leu Gly Asn Asp Phe
            20   25   30

His Thr Asn Lys Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys
        35   40   45

Lys Leu Arg Asn Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg

1650

```
                50                      55                      60

    Ile Gln Arg Gly Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu
    65                      70                      75                      80

    Glu Arg Glu Arg Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp
                        85                      90                      95

    Gln Glu Ile Ile Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu
                        100                     105                     110

    Leu Asp Phe Gly Ser Leu Ser Asn Leu Gln Ser Leu Ser Leu Gln Leu
                    115                     120                     125

    Gly
```

```
<210> 1583
<211> 109
<212> PRT
<213> Homo sapiens

<400> 1583
Asn Asn Gly Arg Ala Lys Lys Gly Arg Gly His Val Gln Pro Ile Arg
 1               5                      10                      15

Cys Thr Asn Cys Ala Arg Cys Val Pro Lys Asp Lys Ala Ile Lys Lys
                20                      25                      30

Phe Val Ile Arg Asn Ile Val Glu Ala Ala Ala Val Arg Asp Ile Ser
            35                      40                      45

Glu Ala Ser Val Phe Asp Ala Tyr Val Leu Pro Lys Leu Tyr Val Lys
    50                      55                      60

Leu His Tyr Cys Val Thr Val Pro Ser Ile Ala Arg Leu Leu Gly Ile
65                      70                      75                      80

Asp Pro Ala Lys Pro Gly Arg Thr Glu His Pro His His Asp Ser Asp
                85                      90                      95

Leu Leu Ala Leu His Leu Arg Pro Pro Lys Pro Met
                100                     105
```

```
<210> 1584
<211> 119
<212> PRT
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<213> Homo sapiens

<220>
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<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1584
Val Gln Arg Phe Ile Lys Ile Asp Gly Lys Val Arg Thr Asp Ile Thr
 1   5   10   15

Tyr Pro Ala Gly Phe Met Asp Val Ile Ser Ile Asp Lys Thr Gly Glu
            20   25   30

Asn Phe Arg Leu Ile Tyr Asp Thr Lys Gly Arg Phe Ala Val His Arg
        35   40   45

Ile Thr Pro Glu Glu Ala Lys Tyr Lys Leu Cys Xaa Val Arg Lys Ile
    50   55   60

Phe Val Gly Thr Lys Gly Ile Pro His Leu Val Thr His Asp Ala Arg
65   70   75   80

Thr Ile Arg Tyr Pro Asp Pro Leu Ile Lys Val Asn Asp Pro Phe Ile
            85   90   95

Leu Ile Xaa Arg Leu Ala Arg Leu Leu Ile Ser Ser Ile Ser Thr Leu
            100   105   110

Val Thr Cys Val Trp Xaa Leu
            115

<210> 1585
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

1652

<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1585
Gly Arg Tyr Ala Ala Lys Arg Phe Arg Lys Ala Gln Cys Xaa Ile Val
 1   5   10   15

Glu Arg Leu Thr Asn Ser Met Met Met Xaa Gly Arg Asn Asn Gly Lys
            20   25   30

Lys Leu Met Thr Val Arg Ile Val Xaa His Ala Phe Glu Ile Ile Arg
            35   40   45

Leu Leu Thr Gly Xaa Glu Pro Ser Ala Gly Pro Gly Glu Arg His His
        50   55   60

Gln His Xaa Ser Pro Gly Arg Xaa His Xaa His Trp Ala Arg Arg Asp
65   70   75   80

Cys

1653

<210> 1586
<211> 111
<212> PRT
<213> Homo sapiens

<400> 1586
```
Lys Asn Cys Ile Val Leu Ile Asp Ser Thr Pro Tyr Arg Gln Trp Tyr
1               5                   10                  15

Glu Ser His Tyr Ala Leu Pro Leu Gly Arg Lys Lys Gly Ala Lys Leu
            20                  25                  30

Thr Pro Glu Glu Glu Glu Ile Leu Asn Lys Lys Arg Ser Lys Lys Ile
        35                  40                  45

Gln Lys Lys Tyr Asp Glu Arg Lys Lys Asn Ala Lys Ile Ser Ser Leu
    50                  55                  60

Leu Glu Glu Gln Phe Gln Gln Gly Lys Leu Leu Ala Cys Ile Ala Ser
65                  70                  75                  80

Arg Pro Gly Gln Cys Gly Arg Ala Asp Gly Tyr Val Leu Glu Gly Lys
                85                  90                  95

Glu Leu Glu Phe Tyr Leu Arg Lys Ile Lys Ala Arg Lys Gly Lys
                100                 105                 110
```

<210> 1587
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1587
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Arg Thr Met Pro Gly Val Thr Val Lys Asp Val Asn Gln Gln Glu Phe
1               5                   10                  15
```

```
Val Arg Ala Leu Ala Ala Phe Leu Lys Lys Ser Gly Lys Leu Lys Val
            20              25              30

Pro Glu Trp Val Asp Thr Val Lys Leu Ala Lys His Lys Glu Leu Ala
            35              40              45

Pro Tyr Asp Glu Asn Trp Phe Tyr Thr Arg Ala Ala Ser Thr Ala Arg
        50              55              60

His Leu Tyr Leu Arg Gly Gly Ala Gly Val Gly Ser Met Thr Lys Ile
65                  70              75                  80

Tyr Gly Gly Arg Gln Arg Asn Gly Val Met Pro Ser His Phe Ser Arg
                85              90              95

Gly Ser Lys Ser Val Ala Arg Arg Xaa Leu Gln Ala Leu Gly Gly Ala
            100             105             110

Glu Asn Gly Gly Xaa Gly Pro Arg Trp Arg Pro Ala Asn
            115             120             125
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<210> 1588
<211> 38
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
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<220>
<221> SITE
<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1588
Cys Met Leu Xaa Leu Val Leu Xaa Leu Leu Ser Ser Ser Ser Ala Glu
 1   5   10   15

Glu Tyr Xaa Gly Leu Ser Ala Asn Gln Cys Ala Val Xaa Ala Lys Asp
            20   25   30

Xaa Val Xaa Cys Gly Tyr
            35

<210> 1589
<211> 55
<212> PRT
<213> Homo sapiens

<400> 1589
Gly Thr Ala Thr Gln Gly Leu Ser Pro Val His Thr Pro Gly Asp Gly
 1   5   10   15

Arg Leu His Lys Ala Val Ser Val Gly Pro Arg Val His Ile Ile Glu
            20   25   30

Glu Leu Gln Ile Phe Ser Ser Gly Gln Pro Val Ala Glu Ser Ala Pro
            35   40   45

Gly Thr Pro Thr Gly Gly Leu
    50   55

<210> 1590
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1590
Leu Glu Asp Gly Phe Gly Glu His Pro Phe Tyr His Cys Leu Xaa Ala

1656

```
        1                 5                    10                    15

      Glu Val Pro Lys Glu His Trp Thr Pro Glu Gly His Ser Ile Val Gly
                  20                    25                    30

      Phe Ala Met Tyr Tyr Phe Thr Tyr Asp Pro Trp Ile Gly Lys Leu Leu
                  35                    40                    45

      Tyr Leu Glu Asp Phe Phe Val Met Ser Asp Tyr Arg Gly Phe Gly Ile
            50                    55                    60

      Gly Ser Glu Ile Leu Lys Asn Leu Ser Gln Val Ala Met Arg Cys Arg
      65                    70                    75                    80

      Cys Ser Ser Met His Phe Phe Gly Ser Arg Met Glu
                        85                    90
```

<210> 1591
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1591
Xaa Gly Gly Phe Xaa Ile Thr Xaa Gly Xaa Asp Glu Gly Lys Leu Val
 1   5   10   15

Thr Pro Ala Gly Asp Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser
            20   25   30

Gly Arg Asp Val Ser Gln Lys Val Leu Arg Ser Gln Thr Trp Val Pro
            35   40   45

Arg Leu Pro Ala Ser Glu Ala Xaa Ser Arg His Arg Gly Lys Val Lys
    50   55   60

Ser Phe Pro Lys Asp Asp Pro Ser Lys Pro Val His Leu Thr Ala Phe
65   70   75   80

Leu Gly Tyr Lys Ala Gly Met Thr His Ile Val Arg Glu Val Asp Arg
            85   90   95

Pro Gly Ser Lys Val Asn Lys Lys Glu Gly Gly Gly Gly Cys Asp His
            100   105   110

Cys Xaa Asp Thr Xaa His Gly Gly Leu Trp Ala Leu Xaa Ala Thr Leu
    115   120   125

Glu Asn Pro Arg Xaa Leu Arg Asn Phe Lys Asn
    130   135

<210> 1592
<211> 42
<212> PRT

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<213> Homo sapiens

<400> 1592
Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His Cys Ile Asp Leu Phe
 1               5                  10                  15


Leu Asp Phe Ile Thr Val Phe Arg Lys Leu Met Met Ile Leu Ala Met
                20                  25                  30


Asn Glu Lys Asp Lys Lys Lys Glu Lys Lys
         35                  40




<210> 1593
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1593
Trp Ile Pro Arg Ala Ala Gly Ser Leu Ser Leu Ala Gln Arg Arg Gly
 1               5                  10                  15

Xaa Thr Lys Thr Tyr Thr Val Gly Xaa Glu Glu Cys Thr Val Xaa Pro
            20                  25                  30

Xaa Leu Ser Ile Pro Cys Lys Leu Gln Ser Gly Thr His Cys Xaa Trp
            35                  40                  45

Thr Asp Gln Leu Leu Gln Gly Xaa Glu Lys Gly Xaa Gln Xaa Arg His
        50                  55                  60

Leu Ala Cys Leu Pro Arg Glu Pro Gly Leu Gly Thr Trp Gln Xaa Leu
 65                  70                  75                  80

Arg Ser Gln Ile Ala
                85


<210> 1594
<211> 183
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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1660

<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1594
Ala Ala Arg Gly Ala Gln Arg Asp Thr Arg Glu Pro Thr Met Ala Pro
 1   5   10   15

Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp Leu Ile Ala
                20   25   30

Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln Thr Ala Phe
                35   40   45

Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly Thr Pro Glu
    50   55   60

Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys Met Thr Xaa
 65   70   75   80

Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp Ile Arg Phe
                85   90   95

Val Tyr Thr Pro Ala Met Glu Ser Val Cys Xaa Tyr Phe His Arg Ser
                100   105   110

His Asn Arg Ser Glu Glu Phe Leu Ile Xaa Gly Lys Leu Gln Asp Gly
                115   120   125

Leu Leu His Ile Thr Thr Cys Xaa Phe Val Ala Pro Trp Asn Ser Leu
    130   135   140

```
Ser Leu Ala Gln Arg Arg Xaa Xaa Thr Lys Thr Tyr Thr Val Gly Xaa
145              150          155              160

Glu Glu Met His Lys Cys Phe Pro Val Tyr Pro Ser Pro Ala Asn Cys
                165          170          175

Arg Val Gly Thr His Cys Leu
            180
```

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<210> 1595
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1595
Ser Thr Cys Pro Asp Glu Gln Cys Val Asn Ser Pro Gly Ser Tyr Gln
 1           5              10              15

Cys Val Pro Cys Thr Glu Gly Phe Arg Gly Trp Asn Gly Gln Cys Leu
            20              25              30

Asp Val Asp Glu Cys Leu Glu Pro Asn Val Cys Ala Asn Gly Asp Cys
            35              40              45

Ser Asn Leu Glu Gly Ser Tyr Met Cys Ser Cys His Lys Gly Tyr Thr
            50              55              60

Arg Thr Pro Asp His Lys His Cys Arg Asp Ile Asp Glu Cys Gln Gln
 65              70              75              80

Gly Asn Leu Cys Val Asn Gly Gln Cys Lys Asn Thr Glu Gly Ser Phe
                85              90              95

Arg Cys Thr Val Asp Arg Gly Tyr Gln Leu Ser Ala Ala Lys Asp Gln
            100             105             110

Phe Glu Asp Ile Asp Glu Cys His Thr Val Ile Ser Val Ala His Gly
            115             120             125
```

```
His Ala Arg Thr Leu Lys Leu Phe Ser Met Cys Phe Leu Thr Xaa Val
    130                 135             140

Thr Glu His Leu Gly Leu Xaa Thr Leu
145                 150
```

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<210> 1596
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1596
Leu Gly Ser Ser Ala Met Ala Pro Ser Arg Lys Phe Phe Val Gly Gly
  1             5                 10                  15

Asn Trp Lys Met Asn Gly Arg Lys Gln Ser Leu Gly Glu Leu Ile Gly
            20              25              30

Thr Leu Asn Ala Ala Lys Val Pro Ala Asp Thr Glu Val Val Cys Ala
        35              40              45

Pro Pro Thr Ala Tyr Ile Asp Phe Ala Arg Gln Lys Leu Asp Pro Lys
    50              55              60

Ile Ala Val Ala Ala Gln Asn Cys Tyr Lys Val Thr Asn Gly Ala Phe
 65             70              75                  80

Thr Gly Glu Ile Ser Pro Gly Met Ile Lys Asp Cys Gly Pro Arg Gly
            85              90                  95

Trp Ser Trp Gly Thr Xaa Arg Glu Ala Cys Leu Trp Gly Ile Arg
            100             105             110
```

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<210> 1597
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1597
Ile Phe Glu Asp Ser Asp Ser Leu Arg Leu Arg Arg Asp Val Leu Pro
 1           5               10              15

Ala Ala Xaa Val Gln Ala Ala Leu Pro Ala Thr Ser Cys Val Pro His
        20              25              30

Ala Lys Val Pro Lys Ser His Val His Pro Arg Ser Ala Leu Ser Leu
        35              40              45

Thr Cys Leu Leu Leu Val His Leu Ser Ile Ala His Leu His Leu Ala
    50              55              60

Ser Ile Asn Ala Leu Leu Xaa Gln Pro Tyr His Pro Gly Ser Xaa Xaa
 65              70              75              80

Ser Pro
```

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<210> 1598
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1598
Xaa Lys Xaa Gly Arg Asn Lys Ala Arg Pro Leu Thr Ser Leu Arg Xaa
 1   5   10   15

Thr Phe Xaa Ala Thr Phe Cys Pro Val Xaa Gly Thr Tyr Ile Leu Asn
            20   25   30

Asp Cys Pro Xaa Thr His Ser Gly Ile Phe Phe Phe Leu Lys Xaa Xaa
        35   40   45

Xaa Lys Ala Phe
    50

```
<210> 1599
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1599
Ala Phe Asn Xaa Ser Tyr Arg Lys Xaa Val Xaa Ala Val Arg Xaa Glu
 1               5                  10                  15

Phe Arg Val Thr Gln Arg Pro Gly Leu Xaa Xaa Leu Gly Leu Glu Phe
            20                  25                  30




<210> 1600
<211> 19
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1600
Ala Arg Gly Phe Phe Phe Phe Phe Phe Phe Phe Xaa Xaa Phe Xaa Phe
 1               5                   10                  15

Phe Lys Lys



<210> 1601
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1601
Arg Xaa Asn Arg Val Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe
 1               5                   10                  15

Phe Phe Phe Xaa Pro Xaa
            20
```

```
<210> 1602
<211> 104
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1602
Asp Phe Gly Arg Ser Phe Leu Leu Trp Phe Ser Leu Phe Phe Leu Pro
 1               5                  10                 15

Phe Tyr Ser Ala Arg Ile Ser Gly Gly Leu Met Val Gly Tyr Asn Val
            20                  25                 30

Ser Val Leu Leu Gln Ile Gly Leu Lys Gly Tyr Pro Ala Glu Ser Pro
            35                  40                 45

Ala Phe Leu Ser Ser Ile Tyr Phe Ser Gly Lys Leu Phe Phe Leu Phe
        50                  55                 60

Phe Phe Lys Val Asn Leu Cys Ile Glu Leu Asn Cys Ile Ser Val Phe
 65                  70                  75                 80

Pro Ala Tyr Val Tyr Ile Ile Pro Met Ile Pro Asn Ser Tyr Leu Tyr
                85                  90                 95

Phe Xaa Thr Asn Ser Gln Ser Glu
            100
```

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<210> 1603
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<400> 1603
Phe Leu Met Leu Ser Phe Met Gly Ile Val Thr Phe Leu Phe Ser Lys
 1               5                  10                  15

Ser His Cys Trp Asn His Gln Gly Cys Gly Met Ser Leu Xaa Val Leu
            20                  25                  30

Phe Met Gln Val Thr Val Thr Phe Ala Ile Met Ala Xaa Phe Glu Thr
            35                  40                  45

Leu Ile Met Cys Phe Tyr Phe Phe Ile Pro Val Lys Met Xaa Xaa Lys
        50                  55                  60

Arg Lys Lys Val Val Ile Ala Pro Xaa Ile Ser Gly Ser Lys Leu Xaa
65                  70                  75                  80

Xaa Lys Phe Pro Lys Lys
                85


<210> 1604
<211> 34
<212> PRT
<213> Homo sapiens
```

```
<400> 1604
Ser Asp Glu Ile Ile Tyr Asn Phe Ile Val Thr Ser Ser Val Phe Pro
 1               5                  10                  15


Phe Glu Arg Cys Met Asn Ser Leu His Phe Tyr Ser Asn Val Leu Ser
            20                  25                  30


Val Asp




<210> 1605
<211> 53
<212> PRT
<213> Homo sapiens

<220>
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<400> 1605
Leu Leu Val Trp Ser Glu Tyr Asn Thr Ser Ile Ile Thr Tyr Asn Ser
 1               5                  10                  15
```

```
Xaa Pro Gly Thr Gly Gly Tyr Lys Tyr Asn Phe Phe Lys Xaa Asn Ser
            20                  25                  30


Trp Leu Ser Thr Xaa Leu Gln Val Pro Leu Xaa Gly Xaa Leu Trp Xaa
            35                  40                  45


Ile Thr Leu Gly Lys
        50
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<210> 1606
<211> 32
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1606
Asp Ala Trp Ala Asp Ala Trp Gly Lys Val Ser Ser Ser Leu Xaa Ser
 1   5   10   15

Xaa Ile Cys Xaa Leu Xaa Xaa Arg Lys Val Arg Xaa Gly Gln Xaa Met
                20   25   30

<210> 1607
<211> 31
<212> PRT
<213> Homo sapiens

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<222> (10)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1607
Leu Ile Met Asp Thr Ile Leu Asn Lys Xaa Ile Gln Val Lys Pro Val
 1   5   10   15

Lys Glu Lys Glu Ile Lys Val Ser Gly Ser Cys Xaa Ser Xaa Val
                20   25   30

<210> 1608
<211> 107
<212> PRT
<213> Homo sapiens

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<220>
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1673

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<400> 1608
Asp Pro Gln Gly Ile Arg His Pro His Ile Val Gln Leu Lys Asp Phe
 1               5                  10                  15

Gln Cys Glu Leu Gly Ala Gly Xaa Leu Pro Lys Gly Val Glu Lys Asp
                20                  25                  30

Ile Xaa Phe Arg Pro Xaa Leu Cys Leu Leu Lys Gln Gln Leu Gly Thr
        35                  40                  45

Val Glu Pro Ile Asn Leu Xaa Phe Asn Pro Leu Gly Ser Phe Phe Ala
        50                  55                  60

Gly Gln Gly Gly Gly Arg Lys Pro Trp Xaa Phe Xaa Xaa Phe Xaa Ser
65                  70                  75                  80

Gln Leu Asn Pro Gly Gln Xaa Asn Phe Leu Gly Pro Leu Lys Glu Lys
                85                  90                  95

Xaa Phe Gly Pro Xaa Xaa Xaa Xaa Leu Ser Xaa
                100                 105


<210> 1609
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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1674

<222> (51)
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<400> 1609
Arg Gln Thr Ser Thr Ala Lys Leu Gln Lys Gly Gly Phe Cys Ser Arg
 1   5   10   15

Arg Lys Glu Asp Val Tyr Leu Gln Gly Ala Lys Gln Gly Glu Leu Gly
                20   25   30

Ser Ser Cys Leu Arg Pro Asn Leu His Asp Asp Leu Gln Ala Arg Val
            35   40   45

Phe Lys Xaa Ser Gly Lys Phe Pro Gly Lys Pro Glu Val Lys Gly Gln
        50   55   60

Asn Cys Lys Ser Val Glu Ile Gly
 65   70

<210> 1610
<211> 77
<212> PRT
<213> Homo sapiens

<400> 1610
Leu Tyr Arg Gly Ser Val Gln Gly Arg Val Glu Leu Leu Ser Glu Gly
 1   5   10   15

Ser Leu Gly Gly Pro Leu Arg Pro Gly Pro Asp Pro Val Leu Gln Gly
                20   25   30

Leu Ser Gln Gly Gln Val His Gly Glu Thr Met Gly Cys Leu Ser Asp
            35   40   45

Thr Asp Leu Ala Leu Leu Ser Pro Pro Ile Arg Leu Ser Phe Leu Cys
        50   55   60

Ser Glu Cys Leu Gln Gly Leu Asp Pro Gly Lys Glu Phe
 65   70   75

<210> 1611
<211> 72
<212> PRT
<213> Homo sapiens

<220>
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<222> (7)
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<220>
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<222> (54)
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<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1611
Glu Asn Leu Pro Ser Gln Xaa Ala Pro Ala Gly Leu Pro Lys Xaa Xaa
 1   5   10   15

```
Gln Pro Cys Leu Tyr Phe Tyr Gly Xaa Asn Gly His Lys Ile Ile Ile
            20                      25                  30

Asn Leu Thr Lys Thr Xaa Leu Phe Ser Xaa Phe Leu Glu Leu Ser Trp
            35              40                  45

Ser Phe Leu Ile Leu Xaa Phe Gly Asn Xaa Arg Leu Phe Leu Lys Cys
        50              55                  60

Phe Xaa Asp Val Lys Ile Xaa Tyr
65                  70
```


<210> 1612
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 1612
Arg Glu Ser Glu Met Leu Cys Asn Leu Leu Xaa Gln Leu Lys His Xaa
 1               5                  10                  15


Met Leu Arg Gly Arg Asn Tyr Lys Xaa Cys Ser Asn Leu Phe Trp Val
            20                  25                  30


Ile Xaa Met Tyr Leu Trp Val Gln Ala Leu Phe Gly Gly Phe Xaa Phe
        35                  40                  45


Gln Arg Asn Xaa Xaa Lys Val Xaa Leu Leu Ile Lys Lys Arg Lys
    50                  55                  60



<210> 1613
<211> 22
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1613
Lys Ser Xaa Ser Xaa Thr Ala Gly Asp Arg Xaa Xaa Thr Ser Gly Ser
```

1678

```
     1                5                10                15

Pro Gly Leu Gln Glu Phe
                20


<210> 1614
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids
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1679

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<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1614
Asp Gly Gly Phe Xaa Xaa Phe Phe Phe Phe Phe Phe Phe Xaa Xaa Phe
 1               5                  10                  15

Phe Phe Tyr Xaa Trp Val Ile Ser Thr Cys Phe Ile Pro Ala Ile Lys
            20                  25                  30

Ile Ile Lys Asn Ile Ser Asn Tyr Tyr Thr His Thr Lys Xaa Val Gln
            35                  40                  45

Ser Leu Xaa Leu Pro Pro Thr Pro Arg Gly Lys Asn Cys Phe Xaa Leu
        50                  55                  60

Trp Glu Val Val Ser Glu Thr Arg Gly Gln Xaa Thr Gln Xaa Arg Leu
65                  70                  75                  80

Gly Gly Xaa Arg Xaa
                85


<210> 1615
<211> 85
<212> PRT
<213> Homo sapiens

<400> 1615
Tyr Ala Val Pro Cys Ser Gly Ile Gln Gly Arg Phe Ser Pro Leu Ser
 1               5                  10                  15
```

```
Phe Leu Leu Ala Gly Asp Ser Cys Thr Cys Ala Gly Ser Cys Lys Cys
            20              25              30

Lys Glu Cys Lys Cys Thr Ser Cys Lys Lys Ser Lys Trp Asp Pro Leu
        35              40              45

Phe Pro Leu Pro Leu Pro Val Leu Gln Pro Val Pro Ser Ser Pro Ser
    50              55              60

Ser Gly Glu Leu Lys Gln Val Trp Gly Cys Pro Ile Ala Pro Gly Asn
65              70              75              80

Trp Trp Pro Pro Gln
                85
```

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<210> 1616
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1616
Ala Glu Gly Asn Ile Arg Xaa Ala Lys Lys Lys Lys Lys Lys Lys Lys
    1           5               10              15
```

```
Lys Lys Lys Lys Lys Lys Lys Lys Xaa Xaa Lys Xaa Xaa
            20                  25
```

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<210> 1617
<211> 37
<212> PRT
<213> Homo sapiens

<220>
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<222> (4)
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<220>
<221> SITE
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<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1617
Gly Pro Ala Xaa Trp Arg Glu Thr Pro Pro Xaa Leu Tyr Lys Glu Phe
  1               5                  10                  15

Pro Gly Val Xaa Gly Ser Phe Ser Leu Xaa Ser Glu Trp Gly Ala Gln
            20                  25                  30

Ile Trp Ala Xaa Cys
            35
```

```
<210> 1618
<211> 22
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1618
Gly Xaa Gly Phe Xaa Pro Ser Pro Ser Cys Phe Pro Gln Cys Leu Lys
 1               5                  10                  15

Xaa Leu Asp Gly Leu Xaa
            20




<210> 1619
<211> 52
<212> PRT
<213> Homo sapiens

<400> 1619
Gln Ser Ile Ser Leu Asn Arg Asp Gly Val Glu Glu Leu Lys Val Gly
 1               5                  10                  15

Ile Cys Ser Leu Met Thr Thr Met Phe Thr Ile Cys Cys Gly Leu Val
            20                  25                  30

Gly Ala Leu Arg Gln Glu Asn His Val Glu Pro Thr Gly Ser Arg Pro
            35                  40                  45

Ala Trp Glu Thr
            50




<210> 1620
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<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1620
Pro Thr Glu Gln Val Thr Leu Gly Ile Thr Ala Gln Ser Tyr Ser Arg
 1               5                  10                  15

Val His Ile Asn Asn Arg Val Tyr Asp Leu Asp Xaa Gly Ser Gly His
            20                  25                  30

Pro Asp Xaa Ala Ala Ala Ile Lys Gly Ser Phe Val Gln Arg Leu Lys
        35                  40                  45

Ser Tyr Val Ile
    50


<210> 1621
<211> 113
<212> PRT
<213> Homo sapiens

<220>
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<222> (87)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1621
Leu Phe Pro Ala Pro Ala Pro Pro Ala Pro Ala Phe Ala Pro Pro
```

1684

```
        1                   5                   10                  15

      Pro Lys Val Pro Ser Pro Glu Arg Ser Ala Pro Arg Val Pro Leu Pro
                    20                  25                  30

      Ser Pro Gln Pro Ser Tyr Pro Phe Arg Pro Ala Ala Ser Gly Gly Thr
                    35                  40                  45

      Pro Pro Pro Ala Cys Leu Pro Pro Ala Gln Pro Cys Gln Val Pro Pro
                    50                  55                  60

      Ala Met Asn Leu Phe Arg Phe Leu Gly Lys Leu Ser Gln Leu Leu Ala
      65                  70                  75                  80

      Ile Ile Leu Leu Leu Leu Xaa Ile Trp Asn Ser Arg Ser Cys Ala Glu
                        85                  90                  95

      Ile Gln Glu Lys Asn Ser Pro Val Trp Cys Gly Xaa Phe Asn Gly Xaa
                        100                 105                 110

      Ile
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<210> 1622
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
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<400> 1622
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Val Phe Lys Thr Met Xaa Gln Val Ser Asn Asp Glu Ile Lys His Leu
 1               5                   10                  15

Phe Val Leu Tyr Gln
                20
```

<210> 1623
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1623
Leu Arg Thr Ser Cys Phe Xaa Leu Asn Xaa Met Ile His Phe Ile Lys
  1               5                  10                  15

Val Pro Val Ile Lys Tyr Xaa Val Lys Tyr Leu Leu Xaa Trp Thr Ile
             20                  25                  30

Xaa Cys Lys Leu Pro Phe Xaa Xaa
         35                  40



<210> 1624
<211> 95
<212> PRT
<213> Homo sapiens

<220>
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<221> SITE
<222> (4)
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<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
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<222> (82)
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<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1624
Ile His Pro Xaa Leu Ala Ser Gln Val Ala Gly His Tyr Arg Arg Glu
 1               5                  10                  15


His Ser Arg Pro Arg Leu Lys Xaa Ala Tyr Ser Lys Lys Gln Phe Gln
                20                  25                  30
```

```
Phe Leu Ser Lys Leu Cys Xaa Xaa Arg Gly Ser Thr Asp Phe Leu Gly
        35              40              45

Pro Val Asn Leu Asn Gln Ser Leu Arg Phe Cys Gln Glu Ser Ser Leu
    50              55              60

Leu Ser Lys Trp Val Phe Pro Asn Gly His Asn Gly Lys Xaa Xaa Arg
65          70              75              80

Gly Xaa Asn Ile Lys Lys Xaa Lys Lys Asn Leu Gly Gly Gly Xaa
            85              90              95
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<210> 1625
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1625
Ala Arg Ala Thr Met Ala Leu Trp Thr Xaa Val Ser Phe Ala Glu Xaa
1               5               10              15

Leu Glu Arg Gly Ser Asp Glu Lys Val Xaa Leu Lys Arg Leu Ala Arg
            20              25              30

Leu Leu Gly Leu Ile Thr Ala Pro
        35              40
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<210> 1626
<211> 26
<212> PRT
<213> Homo sapiens
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1688

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<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1626
Ala Arg Ala Gly Ile Val Pro Xaa His Ser Ser Leu Gly Asp Arg Ala
 1               5                  10                  15

Arg Leu His Leu Lys Lys Lys Lys Lys Xaa
            20                  25
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<210> 1627
<211> 171
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (118)
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<220>
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<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (121)
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<220>
<221> SITE
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<222> (122)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<400> 1627
Glu Leu Gln Ala Ser Glu Asn Gln Pro Cys Ser Arg His Ala Arg Pro
 1           5               10              15

Arg Leu Pro Ser Ser Leu Phe Pro Leu Pro Ala Gln Pro Ser Leu Pro
            20              25              30

Ser Ser Ala Gly Lys Ala Gly Thr His Ser Gly Cys Leu Pro Pro Gly
        35              40              45

Gly Lys Glu Arg Glu Gly Gly Trp Val Gly Xaa Gly Leu Pro Pro Gly
     50              55              60

Asn Val Thr Leu Pro Gly Pro Arg Ile Ala Pro Gly Pro Lys Pro Lys
65              70              75              80

Ala Gln Pro Gly Thr Lys Leu Arg Xaa Ser Ala Gly Arg Ser Tyr Phe
            85              90              95

Tyr Leu Pro Pro Pro Leu Leu Val Pro Pro Pro Gly Arg Leu Ala Ala
            100             105             110

Glu Ser Asp Thr Gly Xaa Xaa Lys Xaa Xaa Xaa Glu Pro Trp Tyr Pro
            115             120             125

Ile Leu Gly Pro Gly Pro Xaa Leu Gly Pro Asn Pro Ser Ser Val Asp
    130             135             140

Asn Gly Val Trp Asn Lys Cys Cys Leu Ser Xaa Gln Gln Lys Lys Lys
145             150             155             160

Lys Arg Gly Gly Arg Phe Arg Gly Phe Lys Ala
            165             170
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1690

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<210> 1628
<211> 120
<212> PRT
<213> Homo sapiens

<220>
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<400> 1628
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 1               5                  10                  15

Pro Pro Arg Ala His His Arg Pro Val Ser Pro Ala Ala Pro Gly Arg
            20                  25                  30

Trp Ser Thr Ser Ala Arg Val Arg Thr Arg Lys Met Val Asn Tyr Ala
            35                  40                  45

Trp Ala Gly Arg Xaa Arg Arg Lys Leu Trp Trp Arg Ser Val Ala Val
        50                  55                  60

Leu Thr Cys Lys Ser Val Val Arg Pro Gly Tyr Arg Gly Glu Arg Leu
65                  70                  75                  80

Asn Arg Thr Ile Leu Val Ser Trp Phe Pro Ser Glu Xaa Phe Pro Gln
                85                  90                  95
```

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Asp Lys Leu Gly Ala Leu Ala Arg Pro Arg Arg Asn Pro Xaa Xaa Gly
            100                 105                 110

Ile Phe Ile Arg Xaa Lys Arg Ile
            115                 120




<210> 1629
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1629
Asn Leu Val Pro Gly Ser Ser Ala Thr Tyr Ile Ser Leu Ser Ser Cys
  1                 5                 10                  15

Cys Phe Val Lys Arg Lys Arg Lys Lys Pro Lys Leu Val Arg Val
            20                  25                  30

Ile Ser Asn Tyr Leu Ile Phe Cys Arg Ser Val Ile Lys Asn Leu Val
            35                  40                  45

Ile Pro Ser Thr Ser Tyr Cys Glu Glu Gln Thr Leu Gly Pro Thr Leu
     50                  55                  60

Lys Ser Pro Leu Val Thr His Ser His Pro Pro Gly Ser Cys Leu Pro
  65                  70                  75                  80

Gly Arg Gly Cys Arg Lys
                85




<210> 1630
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1630
Leu Lys Lys Lys Phe Pro Glu Glu Glu Lys Lys Thr Thr Lys Asn Lys
  1                 5                 10                  15

Thr Leu Lys Val Asp Ile Leu Cys Gly Xaa Thr Phe Glu Leu Asn Ser
            20                  25                  30
```

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Glu Phe Phe
         35
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<210> 1631
<211> 40
<212> PRT
<213> Homo sapiens

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<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1631
His Glu Gln Pro Thr Ala Ala Cys Ile Cys Ile Xaa Arg Gln Val Pro
 1               5                10                  15

Pro Val Pro Ala Ala Arg Xaa Pro Gln Ser Arg Thr Xaa Ser Xaa Gln
             20                25                30

Ala Lys Leu Ala Leu Thr Met Pro
         35                  40
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<210> 1632
<211> 97
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 1632
Xaa Ser Gly Ser Pro Gly Pro Ala Gly Pro Arg Gly Pro Val Gly Pro
 1               5                  10        .          15


Xaa Gly Pro Pro Gly Lys Asp Gly Thr Xaa Gly His Pro Gly Ala Ile
             20              25              30


Gly Pro Pro Gly Pro Arg Gly Asn Xaa Gly Glu Xaa Gly Ser Xaa Gly
         35              40              45


Ser Pro Gly Pro Xaa Arg Ala Thr Arg Ala Leu Leu Xaa Pro Pro Gly
     50              55              60


Ala Pro Gly Pro Cys Cys Gly Gly Val Xaa Ala Ala Ala Ile Ala Gly
     65              70              75              80


Ile Gly Arg Leu Lys Lys Leu Gly Arg Phe Xaa Pro Arg Val Xaa Trp
             85              90              95


Gly


<210> 1633
<211> 43
<212> PRT
<213> Homo sapiens

<220>
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<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1633
Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1   5   10   15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Gly Arg Pro Phe Xaa Arg
            20   25   30

Ile Gln Xaa Tyr Val Xaa Xaa Xaa Ala Thr Ser
        35   40

<210> 1634
<211> 88
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1634
Ala Arg Ala Ala Leu Ser Ala Thr Lys Thr Cys Arg Pro Ala Phe Arg
 1   5   10   15

Gly Ala Ser Ala Ala Pro Arg Gly Gly Gly Pro Ala Arg Ser Pro Gly
            20   25   30

Arg Val Leu Gly Arg His Ala Ala Gly Ser Leu Ala Arg Leu Val Gly
        35   40   45

Arg Ser Arg Gly Phe Trp Leu Leu Gly Gly Glu Val Lys Ser Phe Cys
    50   55   60

Arg Cys Trp Gly Arg Arg Thr Arg Arg Glu Arg Lys Lys Lys Lys Lys
65   70   75   80

Lys Xaa Leu Gly Lys Tyr Phe Xaa
                85

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<210> 1635
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1635
Tyr Ser His Ser Gly Phe Cys Ser Pro Thr Asp Glu Asp Arg Cys Thr
 1               5                  10                  15

Asn Glu Ala Asp Gly Asn His Pro Val Glu Val His Leu Arg Ser Asp
                20                  25                  30

Pro Asp Asp Ala Arg Ala Met Thr Gly Pro Ala Gly Val Ala Pro Arg
            35                  40                  45

Gly Asp Gln Pro Trp Ser Ser His Arg Arg Lys Pro Leu Arg Ser Gly
        50                  55                  60

Lys Arg Arg Arg Lys Xaa Lys Trp Gln Lys Gln Lys Glu Pro Gln Ser
65                  70                  75                  80

Ser Ile Gly Asp His Ser Met His Phe Leu Pro Ala Ala Thr Gln Thr
                85                  90                  95

Leu Pro Glu Leu Leu Xaa Asn Leu Met
            100                 105


<210> 1636
<211> 47
<212> PRT
<213> Homo sapiens

<220>
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<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1636
Gln Arg Pro Arg Xaa Xaa Gly Thr Gly Ser Gly Pro Pro Gly Pro Gly
 1               5                  10                  15


Lys Ala Ser His Gly Gly Gly Ala Pro Val Ser Arg Ser Gly Thr Gly
                20                  25                  30


Ser Glu Asp Gly Arg Glu Ser Arg Ala Thr Val Val Val Xaa Cys
            35                  40                  45




<210> 1637
<211> 55
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
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<223> Xaa equals any of the naturally occurring L-amino acids


<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids


<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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1698

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<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1637
Gly Asp Pro Pro Glu Gly Pro Ala Thr Ser Pro Leu Thr Asn Ser Xaa
  1               5                  10                  15


His Pro Xaa Ser Xaa Gly Thr Ala Ala Ala Thr Gln Arg Arg Xaa Ser
            20                  25                  30


Glu Gln Gly Gly Arg Xaa Thr Cys Gly Pro Ala Gly Ala Gly Ser Pro
            35                  40                  45


Xaa Xaa Pro Pro Arg Ala Xaa
        50                  55



<210> 1638
<211> 55
<212> PRT
<213> Homo sapiens

<220>
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<222> (3)
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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<221> SITE
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
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<222> (41)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1638
Ile Arg Xaa His Ala Thr Xaa Tyr Arg Gly Xaa Phe Cys Xaa Arg Arg
 1               5                  10                  15

Thr Xaa Xaa Xaa Leu His Ser Ala Asn Val Thr Thr Xaa Xaa Leu Leu
            20                  25                  30

Leu Xaa Xaa Phe Tyr Xaa Xaa Arg Xaa Xaa Ala Xaa Val Asn Ile Ser
        35                  40                  45

Xaa Val Pro His Cys Pro Ile
    50                  55


<210> 1639
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1639
Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Xaa Ser
 1               5                  10                  15
```

1701

```
Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Cys Arg Glu
            20                  25                  30

Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser His Gln Leu
            35                  40                  45

Arg Lys Arg Ser Ser Xaa Thr Pro Thr Thr
        50                  55
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<210> 1640
<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1640
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Met Cys Val Asp Cys Met Asn Asp Leu Glu Lys Lys Lys Lys Lys
  1               5                  10                  15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Xaa Pro Xaa
            20                  25                  30

Gly Xaa Pro Xaa Pro
        35
```

<210> 1641
<211> 41

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<212> PRT
<213> Homo sapiens

<400> 1641
Tyr Val Trp Leu Gly His Phe Val Ala Lys Val Arg Thr Cys Leu Trp
 1               5                  10                  15

Lys Thr Ser Leu Trp Leu Gly Glu Ser Val Trp Pro Ala Ala Ser Asp
              20                  25                  30

Leu Cys Arg Val Leu Thr Cys Gln Gly
          35                  40


<210> 1642
<211> 99
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1642
Xaa Pro Ala Ala Ser Tyr Leu Met Thr Leu Met Glu Pro Leu Ser Leu
 1   5   10   15

Ile Xaa Xaa Xaa Leu Ser Pro Pro Leu Xaa Xaa Ser Lys Glu Asn His
            20   25   30

Phe Asp Ala Arg Ser Cys Leu Xaa Ser Xaa Pro Lys Cys Ser Cys Ser
        35   40   45

Xaa Pro Xaa Pro Gly Ile Ser Leu Pro Arg Asp Lys Ser Ala Ser Glu
    50   55   60

Ile Leu His Asp Ser Leu Cys Phe Gln Asn Pro Gly Leu Phe Cys Ile
65   70   75   80

Ser Ser Phe Leu Gly Pro Ala Ser Cys Val Pro Leu Lys Gly Xaa Trp
            85   90   95

Ala Lys Thr

<210> 1643
<211> 42
<212> PRT

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<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1643
Lys Xaa Pro Xaa Asn Leu Gly Lys Ala Arg Leu Gln Val Pro Val Arg
 1               5                   10                  15

Asn Ser Arg Val Asp Leu Arg Val Phe Ile Tyr Ile Asp Ile Tyr Ile
            20                  25                  30

Asp Ile Tyr Arg Tyr Ile Tyr Arg Tyr Ile
            35                  40


<210> 1644
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (42)
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<220>
<221> SITE
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<400> 1644
Arg Val Gly Val Arg Leu Ala Gln Val Pro Xaa His Leu Thr Ser Arg
 1               5                  10                  15

Ser His His Pro His Pro Val Phe His Xaa Arg Leu Lys Ala Thr Met
                20                  25                  30

Arg Met Xaa His Thr Glu Ala Xaa Met Xaa Xaa Asn His Leu
            35                  40                  45
```

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<210> 1645
<211> 69
<212> PRT
<213> Homo sapiens

<400> 1645
His Val Arg Leu Lys Pro Ile Phe Ser Pro Phe Phe Leu Leu Phe Ser
 1               5                  10                  15

Leu Ala Ala His Ile Val Pro Leu Phe Tyr Glu Pro Gln Phe Ser Gly
                20                  25                  30

Leu Ser Leu Lys Lys Lys Ser Ser Leu Asn Ile Ala Phe Arg Lys Leu
            35                  40                  45

Leu Phe Leu Asp Lys Lys Ser Tyr Thr Leu Lys Lys Lys Lys Thr Phe
        50                  55                  60

Ser Arg Lys Ile Tyr
 65
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<210> 1646
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1646
Ile Ile Cys Phe Val Leu Ser Phe Ile Tyr His Phe Phe Leu Tyr Lys
 1               5                  10                  15

Ser Ile Ile Ser Arg Phe Leu Tyr Tyr Met Ile Asp Ile Asn Trp Val
            20                  25                  30

Ile Ser Ser Arg Gln Phe Val Phe Ser Xaa Xaa Pro Pro Ser Thr Val
          35                  40                  45

Ser Gln Arg Pro Asp Xaa Val Gly Lys Val Phe Phe Leu Arg Ile Val
        50                  55                  60

Lys Gly Ser Xaa Gln Leu Gly Leu Ile Lys Ala Xaa Xaa Pro
65                  70                  75


<210> 1647
<211> 58
<212> PRT
<213> Homo sapiens

<400> 1647
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```
Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Val Ser
 1               5                   10                  15

Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Cys Arg Glu
            20                  25                  30

Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser His Gln Leu
        35                  40                  45

Arg Lys Arg Ser Ser Ser Thr Pro Thr Thr
        50                  55
```

<210> 1648
<211> 59
<212> PRT
<213> Homo sapiens

<400> 1648
```
Cys Leu Phe Leu Leu Pro Val Met Leu Leu Gln Ile His Ile Ser Arg
 1               5                   10                  15

Ser Thr Val Asn Val Ser Thr Ser Arg Gly Thr Pro Pro Ser Thr Leu
            20                  25                  30

Ser Val Lys Gly Gln Asn Glu Thr Val Arg Val Lys Gly Thr Gly Arg
        35                  40                  45

Lys Phe Ala Cys Leu Gln Val Thr Arg Ile Arg
        50                  55
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<210> 1649
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

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<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1649
Val Pro Pro Pro Val Pro Trp Gly Gly Pro Xaa Arg Glu Gly Glu Val
 1               5                  10                  15

Ser His Thr Lys Ala Asp Ala Pro Leu Val Gly Gly Xaa Trp Pro Gly
            20                  25                  30

Lys Ile Glu Gly Cys Ala Gly Leu Pro Leu Arg Ala Ala Gln Thr Ala
        35                  40                  45

Leu Met Cys Gly Gly Xaa Ala Arg Trp Val Arg Ala Gln Glu Val Ala
    50                  55                  60

Pro Xaa Thr Val Ala Asp Xaa Leu Pro Arg Val Pro Gly Ser Ser Leu
65              70                  75                  80

Tyr Pro Trp Tyr Ala Xaa Asn Xaa Trp Phe Pro His Pro Xaa Ala Ala
            85                  90                  95

Lys Ser Leu Phe Pro Trp Ile Ser Gln Ala Lys Leu Gly Leu
            100                 105                 110
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<210> 1650
<211> 74
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1650
Ser Pro Glu Gly Leu Ser Leu Leu Ala Pro Xaa Pro Gly Arg Ala Pro
 1               5                  10                  15

Ala Gly Pro Thr Pro Leu Arg Gly Gln Cys Gln Xaa Gly Ser Leu Thr
            20                  25                  30

Gly Ala Val His Leu Ser Asn Gly Asn Ala Gly Val Leu Arg Arg Ala
         35                  40                  45

Gln Gly Gly Gln Lys Pro Pro Val Glu Gln Lys Gly Lys Ser Ser Leu
      50                  55                  60

Asp Leu His Phe Gln Tyr Glu Tyr Arg Pro
 65                  70


<210> 1651
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
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<222>  (49)
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<220>
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<223>  Xaa equals any of the naturally occurring L-amino acids

<400>  1651
Asn Lys Gly Gly Gly Arg Met Met Thr Tyr Pro Glu Val Leu Pro Leu
 1               5                  10                  15

Thr Ala Arg Thr Gly Ala Cys Ser Val Pro Trp Glu His Xaa Ala Gln
            20                  25                  30

Leu Ser Gly Val Gln Ala Val Gly Ser Phe Pro Asn Xaa Ser Ile Ser
            35                  40                  45

Xaa Pro Xaa Xaa Leu Lys Pro Val Gly Gln Ile Ser Lys Xaa Leu Xaa
    50                  55                  60

Xaa Arg Xaa Pro Phe Thr Asn Pro Arg Phe Cys Gly Gln Cys Pro Lys
65                  70                  75                  80

Gly Val Gly
```

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<210> 1652
<211> 90
<212> PRT
<213> Homo sapiens

<220>
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<400> 1652
Phe Phe Phe Phe Leu Asp Val Lys Gly Ile Xaa Phe Gln Arg Leu Leu
 1               5                  10                  15
```

1712

```
     Glu Ser Leu Val Tyr Thr Asp Glu Gly Val Arg Cys Cys Phe Pro Ser
              20              25              30

     Glu Ser Ser Ala Ser Thr Glu Ile Xaa Leu Xaa Leu Ile Phe Asp Ile
              35              40              45

     Leu His Cys Leu Leu Xaa Xaa Xaa Arg Ser Phe Leu Pro Phe Thr Ser
              50              55              60

     Pro Ser Asn Tyr Val Gln Met Cys Arg Leu Leu Xaa Ser Gly Leu Ser
     65              70              75              80

     Pro Lys Ala Leu Thr Leu Gly Leu Xaa Phe
                      85              90
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<210> 1653
<211> 55
<212> PRT
<213> Homo sapiens

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<220>
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<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1653
Lys Leu Trp Phe Val Phe Val Phe Cys Leu Phe His Leu Phe Pro Ser
  1           5               10              15
```

```
Gln Pro Gln Thr Phe Cys Ser Leu Arg Glu Leu Thr Phe Pro Phe Phe
        20                  25                  30

Phe Leu Phe Phe Phe Phe Gly Xaa Leu Xaa Val Xaa Asn Lys Ile Xaa
        35                  40                  45

Xaa Ala Ile Lys Lys Lys Lys
        50                  55
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<210> 1654
<211> 61
<212> PRT
<213> Homo sapiens

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1654
Val Xaa Ala Thr Asn Leu Pro Ser Leu Val Ile Ala Xaa Cys Ser Xaa
 1               5                  10                  15

Ile Glu Ser Leu Val Pro Leu Leu Ile Trp Pro Gln Lys Pro Pro Asn
            20              25                  30

Ser Pro Trp Leu Ile Leu Thr Val Xaa Pro Lys Lys Gly Thr Xaa Ser
        35                  40                  45

Leu Gly Pro Leu Xaa Lys Lys Thr Leu Xaa Lys Xaa Asn
    50                  55                  60


<210> 1655
<211> 20
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1655
Ala Ala Val Leu Gln Thr Ala Arg Arg Ala Arg Ser Ala Cys Arg Leu
 1               5                  10                  15

Xaa Xaa Xaa Xaa
```

1715

20

```
<210> 1656
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1656
Ala Asp Ile Gln Thr Glu Arg Ala Tyr Gln Lys Xaa Xaa Thr Ile Phe
 1               5                   10                  15

Xaa Asn Xaa Lys Arg Val Leu Leu
            20
```

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<210> 1657
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1657
Ala Ala Ala Cys Leu Pro Ala Thr Glu Xaa Ser Gln His His Glu Gly
 1               5               10              15

Leu Asp Leu Leu Ser Pro Leu Pro Gly Arg Glu Gly Leu Gly Xaa Pro
             20              25              30

Ser Xaa




<210> 1658
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1658
Cys Lys Gln Tyr Leu Thr Asn Pro Gln Val Leu Asn Tyr Gln Thr Cys
 1               5               10              15

Ile Lys Asn Phe Gly Trp Gly Asp Leu Gly Ala Glu Pro Asn Leu Arg
             20              25              30

Ala Val His Ala Lys Thr Ser Pro Val Lys Ala Asn Tyr Tyr Thr Gln
         35              40              45

Leu Ile Gln
     50




<210> 1659
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (53)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (133)
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<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

1719

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<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1659
Ser Thr His Ala Ser Gly His Ser His Ser Gln Ala Ser Leu Ala Gly
 1               5                  10                  15

Ser Arg Val Ala Arg Val Arg Cys Leu Leu Gln Leu Gln Asp Asp Arg
            20              25                  30

Pro Glu Asp Ala Leu Leu Leu Phe Leu Pro Gln Pro Arg Gln Glu Ala
            35                  40                  45

Thr Xaa Pro Gln Xaa Pro Ser Arg Pro Ser Arg Gly Pro Xaa Trp Leu
    50                  55                  60

Gly Leu Leu Lys Lys Ala Glu Xaa Gly Gly His Pro Ser Gln Glu Xaa
 65              70                  75                      80

Pro Gly Trp Xaa Gly Glu Xaa Xaa Glu Arg Arg Pro Pro Trp Xaa Leu
                85                  90                      95

Asn Xaa Arg Thr Phe Trp Asn Arg Ile Pro Glu Glu Gln Arg Ala Arg
        100             105                 110

Gly Pro Xaa Leu Xaa Xaa Arg Gly Pro Xaa Xaa Val Xaa Pro Trp Gly
        115             120                 125

Phe Leu Glu Xaa Xaa Pro Gly Lys Glu Ser Xaa Leu Arg Gly Gly Xaa
    130             135                 140

Phe Arg Gly Lys Xaa Leu Phe Leu Ile Lys Ala Lys Leu Gly Ile Xaa
145             150                 155                 160

Phe Xaa Lys Arg Lys Gly
                165


<210> 1660
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (25)
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<220>
<221> SITE
<222> (39)
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<220>
<221> SITE
<222> (45)
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1660
Ser Pro Gly Leu Gln Glu Phe Gly Xaa Arg Gly Xaa Arg Asn Arg Leu
 1               5                  10                  15


Asn Tyr Ala Xaa Xaa His His Xaa Xaa Pro His Arg Xaa Ser Ile Pro
            20                  25                  30


Thr His Ala Leu His Ser Xaa Arg Gly Asp Asp Ala Xaa Leu Thr Ile
        35              40                  45


Lys Ile Xaa Xaa Pro Pro Met Val Leu Glu Pro Thr Ser Thr Pro Asp
        50              55                  60


His Xaa Val Asp
 65




<210> 1661
<211> 61
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1661
Leu Asn Ala Asp Thr Leu Met Asn Asp Gln Gln Gln Leu Ser Ala Leu
 1               5                  10                  15


Lys Lys Thr Leu Ile Phe Glu Phe Thr Cys Trp Val Pro Gly Ser Asn
            20                  25                  30


Gly Gly Lys Arg Pro Leu Phe Ile Lys Arg Gly Pro Pro Phe Xaa Xaa
```

```
             35                    40                    45

Pro Lys Asp Phe Leu Xaa Phe Gln Ile Gly Lys Gly Thr
        50                    55                    60
```

<210> 1662
<211> 54
<212> PRT
<213> Homo sapiens

<220>
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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1662
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Thr Val Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Asn Leu
  1             5              10                   15

Glu Val Xaa Gly Ile Xaa Asn Leu Asp Ile Xaa Phe Gly Thr Ser Asn
            20                  25                   30

Pro His Ser Pro Thr His Ala Gly Gly Cys Ala Cys Arg Thr Xaa Leu
            35                  40                   45

Thr Asp Trp Trp Ile Leu
        50
```

```
<210> 1663
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1663
Ala Arg Glu Lys Leu Cys Val Arg Gly Arg Gly Leu Phe Arg Cys Arg
 1               5                  10                  15

Val Ser Ser Ser Cys Thr Leu Phe Lys Ser Leu His Trp Arg Asn Ser
             20                  25                  30

Ala Ile Thr Ser Ser Leu Val Ala Glu Gly Arg Gly Asn Ile His Leu
         35                  40                  45

Phe Met Pro Val Cys Cys Met Gln Ala Phe Trp Leu Pro Thr Leu Gln
     50                  55                  60

Gln Asn Asn Cys Thr Asn Ser Leu Val Pro Ile Pro Pro Thr Glu Ser
 65                  70                  75                  80

Pro Gly Ala Thr Val Phe Phe Ala Leu His Cys Lys Glu Arg Asp
                 85                  90                  95


<210> 1664
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<400> 1664
Val Asn Gln Glu Thr Thr Pro Val Asp Cys Gly Ala Leu Glu Gly Leu
 1               5               10              15

Val Gly Val Asn Leu Pro Thr Pro Tyr Asn Cys Gly Arg Ile Gln Lys
             20              25              30

Ser Leu Ser Phe Tyr Ile His Ser Leu Asp Val Ile Gly Pro Leu Pro
         35              40              45

Pro Ile Ser Leu Arg Cys His Ala Ser Met Gly Ser Gly Val Val Arg
     50              55              60

Lys Asn Lys Arg Arg Xaa Asp Ser Leu Val Met Asp Lys Ile Leu Thr
 65              70              75              80

Thr Val Phe Pro Xaa Gly Ile Pro Tyr Xaa Xaa Phe Asn Phe Phe Phe
             85              90              95

Ser Leu Lys Asn
             100


<210> 1665
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
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<220>
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<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1665
Ser Ala Pro Gly Gly Ser Cys Tyr Ser Gly Xaa Pro Arg Val Pro Lys
 1               5                  10                  15

Cys Xaa Ile Gln Xaa Asp Pro Xaa Ser Xaa Pro Pro Cys Leu Gln Leu
             20              25                  30

Val



<210> 1666
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1666
Gly Arg Val Gly Gly Arg Val Gly Gly Arg Val Gly Arg Glu Pro Gln
 1               5                  10                  15

Val Tyr Thr Leu Pro Pro Ser Arg Glu Xaa Met Thr Lys Lys Gln Ser
             20                  25                  30

Ala Glu Leu Pro Xaa Ser Xaa Gly Phe Tyr Pro Thr Lys Ser Pro
             35                  40                  45



<210> 1667
<211> 34
<212> PRT
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<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1667
Leu Glu Ile Thr Leu Gln Gly Glu Pro Lys Leu Arg Pro Pro Lys Pro
 1   5   10   15

Glu Arg Ala Thr Leu Glu Gln Leu Lys Glu His Thr Pro Leu Phe Leu
            20   25   30

Pro Xaa

<210> 1668
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1668
Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Val Xaa

1727   .

```
    1                 5                    10                      15

    Pro Lys Arg Asn Lys Leu Phe Gly His Xaa Glu Lys Thr Leu Tyr Arg
                20                  25                  30

    Glu Glu Xaa Xaa Phe Xaa Asn Pro Tyr
             35                  40
```

<210> 1669
<211> 96
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1669
```
Gly Arg Ala Leu Pro Gly Arg Val Arg Ala Ala Thr Gly Glu Gly Arg
  1                 5                    10                  15

Thr Phe Val Xaa Asn Gly Thr Val Leu Leu Ala Pro Pro Arg Gly Gly
             20                  25                  30

Pro Leu Val Ser Pro Leu Pro Ala Arg Arg Arg Cys Val Trp Glu Gly
             35                  40                  45

Val Gly Cys Gly Pro Arg Pro Asp Leu Ala Val Pro Pro Ala Ala Phe
      50                  55                  60

Cys Val Ala Gly Ala Gly Arg Arg Gly Pro Leu Thr Xaa Gln Thr Ala
  65                  70                  75                  80
```

1728

```
Leu Ala Val Xaa Ser Ser Gly Xaa Arg Leu Ala Gly Gly Thr Pro Thr
            85                  90                  95
```

<210> 1670
<211> 140
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1670
```
Gly Ser Thr His Ala Ser Gly Ser Thr Glu Lys Glu Gly Leu Leu His
  1           5                  10                  15

Glu Ala Thr Leu Ser Val His Gln Gly Leu Gly Leu Arg Gly Pro Trp
            20                  25                  30

Ser Ser Cys Ser Ser Pro Ala Pro Pro Trp Met His Cys Cys Arg Ala
            35                  40                  45

Glu Xaa Pro Leu Pro Gly Pro Ala Leu Gly Phe Leu Glu Thr Ser Phe
    50                  55                  60

Ser Phe Ala Ile Phe Phe Lys Trp Glu Lys Gly Gly Gln Leu Ser Leu
65                  70                  75                  80

Gly Lys Arg Gly Pro Ala Thr Cys Pro Ala Trp Ala Pro Glu Pro Ser
                85                  90                  95
```

```
Ser Leu Thr Gly Gln Ser Leu Val Gly Lys Ala Ala Ser Trp Pro Xaa
            100             105             110

Ser Leu Leu Met Phe Leu Val Ser Arg Val Gln Ser Gln Leu Phe Xaa
            115             120             125

Phe Leu Val Val Pro Val Xaa Glu Ala Phe Gln Asn
        130             135             140
```

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<210> 1671
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1671
His Xaa Xaa Met Glu Ser Asp Lys Met Val Thr Gly Ser Trp Gly Pro
  1               5               10              15

Arg Leu Ser Xaa His Glu Gly Cys Ser Ala Xaa Cys Ile Ser Val Tyr
            20              25              30

Val Val
```

```
<210> 1672
<211> 113
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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1672
Arg Xaa Leu Leu Thr Ile Xaa Glu Ser Trp Tyr Xaa Cys Arg Tyr Arg
 1               5               10              15

Ser Gly Ile Pro Gly Gly Ile Pro Leu Ser Pro Arg Asp Pro Thr Leu
            20              25              30

Ala Ser Trp Pro Thr Arg Ser Arg Glu Ser Leu Arg Glu Arg Arg Arg
        35              40              45

Ser Arg Ala Ala Ser Gly Leu Gly Ile Arg Pro Leu Gly Pro Pro Leu
    50              55              60

Val Ser Arg Val Gly Arg Asn Arg Arg Leu Ala His Leu Ala Trp Val
65              70              75              80

Cys Pro His Val Val Ile Val Gln Ile Asn Ala His Ser Glu Leu Ala
            85              90              95

Val Tyr Phe Leu Lys Phe Asn Ile Val Phe Val Ile Leu Lys Tyr Leu
            100             105             110

Leu


<210> 1673
<211> 86
<212> PRT
<213> Homo sapiens

<220>
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1731

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<400> 1673
Pro Ala Phe Asn Phe Asp Pro Leu Phe Phe Leu Phe Val Arg Cys Thr
 1   5   10   15

Arg Leu Pro Ser Cys Phe Ser Leu Leu Ser Cys His Gln Pro Phe Leu
            20   25   30

Leu Gly Gly His Val Leu Gly Lys Arg Pro His Asp Leu Ser Gly Ser
        35   40   45

Thr Gln Cys Leu Arg His Pro Ala Ser Phe Ala Cys Ile Pro Gln Thr
    50   55   60

Ile Ser Leu Ile Leu Phe Thr Ala Ala Asn Leu Ser Leu Val Asp Glu
65   70   75   80

Thr Val Phe Ile Xaa Leu
            85

<210> 1674
<211> 56
<212> PRT
<213> Homo sapiens

<400> 1674
Ser Asp Tyr Glu Leu Leu Phe Lys Arg Lys Met Leu Phe Ile His Ala
 1   5   10   15

Glu Val Ile Gln Phe Pro Pro Ser Tyr Arg Ser Ile Leu Ile His Pro
            20   25   30

Thr Leu Glu Met Gln His Leu Cys Gly Arg Leu Phe His Lys Pro Pro
        35   40   45

Arg Leu Leu Arg Leu Gly Arg Tyr
    50   55

<210> 1675
<211> 65
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (10)
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<220>
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<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1675
Leu Val Cys Ile Leu Pro Lys Val Arg Xaa Pro Thr Leu Gly Ile Thr
 1   5   10   15

Leu Leu Ile Val Ile Leu Val Xaa Ile Leu Pro Gly Val Met Tyr Ser
                20   25   30

Leu Lys Ala Leu Asn Val Cys Ile Ala Thr Xaa His Gln Ile Leu Asn
            35   40   45

Gly Leu Ser Phe Gly Trp Asn Tyr Lys Leu Lys Lys Cys Phe Ser Gly
        50   55   60

Lys
 65

<210> 1676
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1676
Pro Thr Glu Gln Val Thr Leu Gly Ile Thr Ala Gln Ser Tyr Ser Arg
 1   5   10   15

Val His Ile Asn Asn Arg Val Tyr Asp Leu Asp Val Gly Ser Gly His
                20   25   30

Pro Asp Gly Ala Ala Ala Ile Lys Gly Ser Phe Xaa Gln Arg Leu Lys
            35   40   45

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Ser Tyr Val Ile
     50


<210> 1677
<211> 40
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)
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<220>
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<222> (2)
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<220>
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<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1677
Xaa Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Xaa Lys Lys
  1               5                  10                  15

Lys Lys Lys Lys Lys Lys Gly Gly Arg Xaa Lys Gly Ser Lys Leu Thr
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1734

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                    20              25              30
     Tyr Xaa Cys Met Xaa Arg Xaa Ser
               35              40



<210> 1678
<211> 49
<212> PRT
<213> Homo sapiens

<400> 1678
Thr Ala Ala Met Ser Ile Phe Thr Pro Thr Asn Gln Ile Arg Leu Thr
 1               5              10              15

Asn Val Ala Val Val Arg Met Lys Arg Ala Arg Lys Arg Phe Glu Ile
           20              25              30

Ala Cys Tyr Arg Asn Lys Ser Ser Ala Gly Gly Gly Leu Trp Lys Lys
           35              40              45

Thr



<210> 1679
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1679
Ala Ala Ala Gln Gln Val Val Asp Gln Ala Thr Glu Ala Gly Gln Lys
 1               5              10              15

Ala Met Asp Gln Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys Thr
           20              25              30

Ala Asn Gln Ala Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe Gly
           35              40              45

Leu Leu Lys
       50



<210> 1680
<211> 41
<212> PRT
<213> Homo sapiens
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1735

<400> 1680
Ala Phe Asn Arg Ser Gln Arg Gly Ser Cys Ser Ala Thr Tyr Glu Thr
 1   5   10   15

Pro Thr Gln Lys Gln Val Val Tyr Glu Trp Phe Ser Ala Arg Phe Pro
                20   25   30

Thr Asn Val Arg Cys Val Thr Gly Glu
            35   40

<210> 1681
<211> 34
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1681
Gly Xaa Gly Val Arg Val Asn Val Arg Thr Ser Ala Gly Cys Ser Pro
 1   5   10   15

His Pro Asn Pro Leu Pro Lys Gly Arg Arg Gly Pro Val Thr Gln Phe
                20   25   30

Ala Leu

<210> 1682
<211> 85
<212> PRT
<213> Homo sapiens

<220>
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<222> (36)
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<220>
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<222> (64)
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<220>

<221> SITE
<222> (71)
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<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1682
Ala Ser Asn Ser Asn Tyr Ala Leu Ile Gly Ala Leu Arg Ala Val Ala
 1   5   10   15

Gln Thr Ile Ser Tyr Glu Val Thr Leu Ala Ile Ile Pro Thr Ile Asn
            20   25   30

Ile Thr Asn Xaa Leu Ala Pro Leu Thr Ser Pro Pro Leu Ser Gln His
        35   40   45

Lys Asn Thr Pro Glu Tyr Pro Ala Ile Ile Thr Leu Trp Pro Tyr Xaa
     50   55   60

Ile Ile Phe His Thr Arg Xaa Asn Asn Glu Pro Pro Ser Xaa Leu Xaa
 65   70   75   80

Lys Gly Asn Phe Xaa
                85

<210> 1683
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1683
Val Gly Leu Glu Ile Asn Met Leu Ala Phe Ile Pro Val Leu Thr Lys
 1   5   10   15

Lys Ile Asn Pro Arg Ser Thr Glu Ala Ala Ile Lys Tyr Phe Leu Thr
            20   25   30

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        Gln Ala Thr Ala Ser Ile Ile Leu Leu Ile Ala Ile Leu Phe Asn Asn
                 35                  40                  45

        Ile Leu Ser Gly Gln
                 50
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<210> 1684
<211> 169
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1684
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        Pro Val Ser Ala Lys Lys Glu Lys Lys Val Ser Cys Met Phe Ile Pro
         1               5                  10                  15

        Asp Gly Arg Val Ser Val Ser Ala Arg Ile Asp Arg Lys Gly Phe Cys
                         20                  25                  30

        Glu Gly Asp Glu Ile Ser Ile His Ala Asp Phe Glu Asn Thr Cys Ser
                 35                  40                  45

        Arg Ile Val Val Pro Lys Ala Ala Ile Val Ala Arg His Thr Tyr Leu
                 50                  55                  60
```

```
Ala Asn Gly Gln Thr Lys Val Leu Thr Gln Lys Leu Ser Ser Val Arg
 65                  70              75              80

Gly Asn His Ile Ile Ser Gly Thr Cys Ala Ser Trp Arg Gly Lys Ser
             85              90              95

Leu Arg Val Gln Lys Ile Arg Pro Ser Ile Leu Gly Cys Asn Ile Leu
             100             105             110

Arg Val Glu Tyr Ser Leu Leu Ile Tyr Val Ser Val Pro Gly Ser Lys
         115             120             125

Lys Val Ile Leu Asp Leu Pro Leu Val Ile Gly Ser Arg Ser Gly Leu
     130             135             140

Ser Xaa Arg Thr Ser Ser Trp Xaa Ala Xaa Thr Xaa Ser Glu Asp Glu
145             150             155             160

Xaa Gly Arg Ser Glu His Pro Asp Thr
            165
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<210> 1685
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1685
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aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120
tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg 180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca accccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
gactctagag gat                                                   733
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<210> 1686
<211> 5
<212> PRT
<213> Homo sapiens

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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1686
Trp Ser Xaa Trp Ser
  1               5


<210> 1687
<211> 86
<212> DNA
<213> Homo sapiens

<400> 1687
gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag                                     86


<210> 1688
<211> 27
<212> DNA
<213> Homo sapiens

<400> 1688
gcggcaagct ttttgcaaag cctaggc                                    27


<210> 1689
<211> 271
<212> DNA
<213> Homo sapiens

<400> 1689
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t                               271


<210> 1690
<211> 32
<212> DNA
<213> Homo sapiens

<400> 1690
gcgctcgagg gatgacagcg atagaacccc gg                              32
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1740

<210> 1691
<211> 31
<212> DNA
<213> Homo sapiens

<400> 1691
gcgaagcttc gcgactcccc ggatccgcct c   31

<210> 1692
<211> 12
<212> DNA
<213> Homo sapiens

<400> 1692
ggggactttc cc   12

<210> 1693
<211> 73
<212> DNA
<213> Homo sapiens

<400> 1693
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60
ccatctcaat tag   73

<210> 1694
<211> 256
<212> DNA
<213> Homo sapiens

<400> 1694
ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60
caattagtca gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc 120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240
cttttgcaaa aagctt   256

INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : C12P 19/34
US CL : 435/91.1
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 435/91.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
MEDLINE, SCISEARCH, GenEmbl Database

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Database GenEmbl on STN. KELKER, W. 'Sequence of human E-cadherin cDNA', GenEmbl Database, Aceesion Z18923.1, Version Z18923.1 GI:31074, 04 December, 1992 (04.12.1992), see nucleotide position 456-1007.	1-12, 14-16, and 21 for SEQ ID NO:1
Y	BANERJI, J. A gene pair from the human major histocompatibility complex encodes large proline-rich proteins with multiple repeated motifs and a single ubiquitin-like domain, Proc. Natl. Acad. Sci. USA, 1990, Vol 87, pages 2374-2378, see entire document.	1-12, 14-16, and 21 for SEQ ID NO:2
Y	Database GenEmbl on STN. SKUCE, C. 'Homo sapiens chromosome 20 clone RP4-661120 map q11.23-12', GenEmbl Database, Aceesion AL031669, Version AL031669.18 GI:6983365, 11 FEBRUARY, 2000 (04.02.2000), see nucleotide position 63147-63482.	1-12, 14-16, and 21 for SEQ ID NO:3
Y	Database GenEmbl on STN. RAKER, V.A. 'Human SnRNP core protein Sm D2 mRNA, complete cds'., GenEmbl Database, Accession U15008, Version U15008.1 GI:600747, 10 December, 1994 (10.12.1994), see nucelotide position 23-479	1-12, 14-16, and 21 for SEQ ID NO:4
Y	Database GenEmbl on STN. ELLER et al. 'Cellular retinoic acid-binding protein [human, skin, mRNA, 735 nt]', GenEmbl Database, Accession S74445, Version S74445.1, GI:241541, 7 May, 1993 (07.05.1993), see nucleotide position 7-733.	1-12, 14-16 and 21 for SEQ ID NO:6

☒ Further documents are listed in the continuation of Box C.   ☐   See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
03 May 2000 (03.05.2000)	2 6 JUL 2000
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Michael Woodward Telephone No. (703) 308-0196

Form PCT/ISA/210 (second sheet) (July 1998)

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Database GenEmbl on STN. SHARMA et al 'Human class III alcohol dehydrogenase (ADH5) chi subunit mRNA, complete cds.', GenEmbl Database, Accession M30471, Version M30471.1 GI:178133, 5 October, 1995 (05.10.1997), see nucleotide position 2-2277.	1-12, 14-16, and 21 for SEQ ID NO:8
Y	Database GenEmbl on STN. ABEDINIA , M. 'Human transketolase (TKT) mRNA, complete cds.', GenEmbl, Accession U55017 M86521, Version U55017.1 GI:1297296, 6 May, 1996 (06.05.1996), see nucleotide position 687-2038.	1-12, 14-16, and 21 for SEQ ID NO:10

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/05882

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claim Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claim Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-12, 14-16, and 21 for the first 10 sequences in Table 1

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1.

Group 1, claims 1-12, 14-16, and 21 in so far as they are drawn to the first ten polynucleotides of Table 1 (pages 12-118), protein, vector, gene, method of making host cell, recombinant host cell, method of producing the protein of SEQ ID NO:61.

Groups 2-209, claims 1-12, 14-16, in so far as they are drawn to the next 208 polynucleotide groups (any four sequences constitute a single group) and encoded proteins listed in Table 1.

Groups 210-418, claim 13, in so far as they are drawn to isolated antibodies that bind to any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 419-627, claims 15-16, in so far as they are drawn to a method of making any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 628-836, claim 17, in so far as they are drawn to a method of treatment by administration any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 837-1045, claim 18, in so far as they are drawn to a method of diagnosing a pathological condition by determining a presence or absence of a mutation in any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 1046-1255, claim 19, in so far as they are drawn to a method of diagnosing a pathological condition by determining the presence or amount of any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 1256-1465, claims 20 and 23, in so far as they are drawn to a method of identifying any one group of the next 208 polypeptide sequence groups listed in Table 1, and the product produce by the same method.

Group 1466-1675, claim 22, in so far as they are drawn to a method of identifying an activity in a biological assay by expression of any one group of the next 208 polypeptide sequence groups listed in Table 1.

The inventions not elected, do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT rule 13.2, the non-elected groups lack the same or corresponding technical features for the following reasons: Group 1 corresponds to the first invention wherein the first product is the polynucleotide, and the first method of use is the method of using the polynucleotide to make the protein, and the protein. Note, there is no method of making the polynucleotide. Each of groups 2-1675 does not share the same or corresponding special technical feature because, each group is drawn to different polynucleotide or encoded protein. Additionally, each of groups 210-1675 does not share the same or corresponding technical feature because, each group is drawn to different compounds or methods of using any of the fifty polynucleotides and encoded proteins listed in Table 1. The Authority therefore considers that the several inventions do not share a special technical feature within the meaning of PCT Rule 13.2 and thus do not relate to a single general inventive concept within the meaning of PCT Rule 13.1.

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<210> 920
<211> 40
<212> PRT
<213> Homo sapiens

<400> 920
Leu Ala Phe Phe Leu Thr Ser Glu Gly Glu Lys Lys Val Ala Thr Tyr
 1               5                  10                  15

Met Phe Glu Lys Pro Leu Lys Ser Thr Gln Ser Lys Asp Phe Met Leu
            20                  25                  30

Gln Phe Gly His Met Leu Arg Val
            35                  40



<210> 921
<211> 372
<212> PRT
<213> Homo sapiens

<400> 921
Leu Leu Gly Pro Ala Gly Gln Arg Ser His Ala Ala Pro Met Arg Pro
 1               5                  10                  15

Leu Pro Pro Val Gly Asp Val Arg Leu Glu Leu Ser Pro Pro Pro Pro
            20                  25                  30

Leu Leu Pro Val Pro Val Val Ser Gly Ser Pro Val Gly Ser Ser Gly
            35                  40                  45

Arg Leu Met Ala Ser Ser Ser Ser Leu Val Pro Asp Arg Leu Arg Leu
        50                  55                  60

Pro Leu Cys Phe Leu Gly Val Phe Val Cys Tyr Phe Tyr Tyr Gly Ile
65                  70                  75                  80

Leu Gln Glu Lys Ile Thr Arg Gly Lys Tyr Gly Glu Gly Ala Lys Gln
                85                  90                  95

Glu Thr Phe Thr Phe Ala Leu Thr Leu Val Phe Ile Gln Cys Val Ile
            100                 105                 110

Asn Ala Val Phe Ala Lys Ile Leu Ile Gln Phe Phe Asp Thr Ala Arg
            115                 120                 125

Val Asp Arg Thr Arg Ser Trp Leu Tyr Ala Ala Cys Ser Ile Ser Tyr
            130                 135                 140

Leu Gly Ala Met Val Ser Ser Asn Ser Ala Leu Gln Phe Val Asn Tyr
```

```
            ·145                    150                    155                    160

          Pro Thr Gln Val Leu Gly Lys Ser Cys Lys Pro Ile Pro Val Met Leu
                        165                 170                 175

          Leu Gly Val Thr Leu Leu Lys Lys Lys Tyr Pro Leu Ala Lys Tyr Leu
                        180                 185                 190

          Cys Val Leu Leu Ile Val Ala Gly Val Ala Leu Phe Met Tyr Lys Pro
                        195                 200                 205

          Lys Lys Val Val Gly Ile Glu Glu His Thr Val Gly Tyr Gly Glu Leu
                210                 215                 220

          Leu Leu Leu Leu Ser Leu Thr Leu Asp Gly Leu Thr Gly Val Ser Gln
          225                 230                 235                 240

          Asp His Met Arg Ala His Tyr Gln Thr Gly Ser Asn His Met Met Leu
                        245                 250                 255

          Asn Ile Asn Leu Trp Ser Thr Leu Leu Leu Gly Met Gly Ile Leu Phe
                        260                 265                 270

          Thr Gly Glu Leu Trp Glu Phe Leu Ser Phe Ala Glu Arg Tyr Pro Ala
                        275                 280                 285

          Ile Ile Tyr Asn Ile Leu Leu Phe Gly Leu Thr Ser Ala Leu Gly Gln
                290                 295                 300

          Ser Phe Ile Phe Met Thr Val Val Tyr Phe Gly Pro Leu Thr Cys Ser
          305                 310                 315                 320

          Ile Ile Thr Thr Thr Arg Lys Phe Phe Thr Ile Leu Ala Ser Val Ile
                        325                 330                 335

          Leu Phe Ala Asn Pro Ile Ser Pro Met Gln Trp Val Gly Thr Val Leu
                        340                 345                 350

          Val Phe Leu Gly Leu Gly Leu Asp Ala Lys Phe Gly Lys Gly Ala Lys
                        355                 360                 365

          Lys Thr Ser His
                370
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<210> 922
<211> 363
<212> PRT
<213> Homo sapiens

<400> 922
Pro Ala Arg Thr Met Phe Tyr Ala His Phe Val Leu Ser Lys Arg Gly
1   5   10   15

Pro Leu Ala Lys Ile Trp Leu Ala Ala His Trp Asp Lys Lys Leu Thr
            20   25   30

Lys Ala His Val Phe Glu Cys Asn Leu Glu Ser Ser Val Glu Ser Ile
        35   40   45

Ile Ser Pro Lys Val Lys Met Ala Leu Arg Thr Ser Gly His Leu Leu
    50   55   60

Leu Gly Val Val Arg Ile Tyr His Arg Lys Ala Lys Tyr Leu Leu Ala
65   70   75   80

Asp Cys Asn Glu Ala Phe Ile Lys Ile Lys Met Ala Phe Arg Pro Gly
                85   90   95

Val Val Asp Leu Pro Glu Glu Asn Arg Glu Ala Ala Tyr Asn Ala Ile
            100   105   110

Thr Leu Pro Glu Glu Phe His Asp Phe Asp Gln Pro Leu Pro Asp Leu
        115   120   125

Asp Asp Ile Asp Val Ala Gln Gln Phe Ser Leu Asn Gln Ser Arg Val
    130   135   140

Glu Glu Ile Thr Met Arg Glu Glu Val Gly Asn Ile Ser Ile Leu Gln
145   150   155   160

Glu Asn Asp Phe Gly Asp Phe Gly Met Asp Asp Arg Glu Ile Met Arg
                165   170   175

Glu Gly Ser Ala Phe Glu Asp Asp Asp Met Leu Val Ser Thr Thr Thr
            180   185   190

Ser Asn Leu Leu Leu Glu Ser Glu Gln Ser Thr Ser Asn Leu Asn Glu
        195   200   205

Lys Ile Asn His Leu Glu Tyr Glu Asp Gln Tyr Lys Asp Asp Asn Phe
    210   215   220

Gly Glu Gly Asn Asp Gly Gly Ile Leu Asp Asp Lys Leu Ile Ser Asn
225   230   235   240

Asn Asp Gly Gly Ile Phe Asp Asp Pro Pro Ala Leu Ser Glu Ala Gly
                245   250   255

Val Met Leu Pro Glu Gln Pro Ala His Asp Asp Met Asp Glu Asp Asp
            260   265   270

```
Asn Val Ser Met Gly Gly Pro Asp Ser Pro Asp Ser Val Asp Pro Val
        275                 280             285

Glu Pro Met Pro Thr Met Thr Asp Gln Thr Thr Leu Val Pro Asn Glu
        290                 295             300

Glu Glu Ala Phe Ala Leu Glu Pro Ile Asp Ile Thr Val Lys Glu Thr
305                 310             315                 320

Lys Ala Lys Arg Lys Arg Lys Leu Ile Val Asp Ser Val Lys Glu Leu
            325             330                 335

Asp Ser Lys Thr Ile Arg Ala Gln Leu Ser Asp Tyr Ser Asp Ile Val
            340             345             350

Thr Thr Leu Asp Leu Ala Pro Pro Pro Arg Asn
        355             360
```

```
<210> 923
<211> 296
<212> PRT
<213> Homo sapiens

<400> 923
Val Ala Val Ile Trp Ala Tyr Trp Leu Gly Leu Lys Val Arg Arg Glu
  1           5               10                  15

Tyr Arg Lys Phe Phe Arg Ala Asn Ala Gly Lys Lys Ile Tyr Glu Phe
            20              25                  30

Thr Leu Gln Arg Ile Val Gln Lys Tyr Phe Leu Glu Met Lys Asn Lys
            35              40                  45

Met Pro Ser Leu Ser Pro Ile Asp Lys Asn Trp Pro Ser Arg Pro Tyr
        50              55                  60

Leu Phe Leu Asp Ser Thr His Lys Glu Leu Lys Arg Ile Phe His Leu
65                  70                  75                  80

Trp Arg Cys Lys Lys Tyr Arg Asp Gln Phe Thr Asp Gln Gln Lys Leu
                85                  90                  95

Ile Tyr Glu Glu Lys Leu Glu Ala Ser Glu Leu Phe Lys Asp Lys Lys
                100             105             110

Ala Leu Tyr Pro Ser Ser Val Gly Gln Pro Phe Gln Gly Ala Tyr Leu
            115             120             125
```

```
Glu Ile Asn Lys Asn Pro Lys Tyr Lys Lys Leu Lys Asp Ala Ile Glu
    130             135             140

Glu Lys Ile Ile Ile Ala Glu Val Val Asn Lys Ile Asn Arg Ala Asn
145             150             155             160

Gly Lys Ser Thr Ser Arg Ile Phe Leu Leu Thr Asn Asn Asn Leu Leu
            165             170             175

Leu Ala Asp Gln Lys Ser Gly Gln Ile Lys Ser Glu Val Pro Leu Val
        180             185             190

Asp Val Thr Lys Val Ser Met Ser Ser Gln Asn Asp Gly Phe Phe Ala
        195             200             205

Val His Leu Lys Glu Gly Ser Glu Ala Ala Ser Lys Gly Asp Phe Leu
    210             215             220

Phe Ser Ser Asp His Leu Ile Glu Met Ala Thr Lys Leu Tyr Arg Thr
225             230             235             240

Thr Leu Ser Gln Thr Lys Gln Lys Leu Asn Ile Glu Ile Ser Asp Glu
                245             250             255

Phe Leu Val Gln Phe Arg Gln Asp Lys Val Cys Val Lys Phe Ile Gln
        260             265             270

Gly Asn Gln Lys Asn Gly Ser Val Pro Thr Cys Lys Arg Lys Asn Asn
        275             280             285

Arg Leu Leu Glu Val Ala Val Pro
    290             295
```

```
<210> 924
<211> 91
<212> PRT
<213> Homo sapiens

<400> 924
His Phe Ser Ile Asn Tyr Asn Gln Lys Ser Asp Leu Leu Lys Glu Lys
1           5               10              15

Ser Asp Cys Lys Ser Phe Gln Gly Gln Thr Ala Thr Glu Pro Pro Thr
            20              25              30

Pro Lys Gln Glu Thr Leu Val Lys Val Gln Glu Ala Arg Arg Phe Ser
        35              40              45

Pro Thr Lys Val Gln Leu Gly Asn Asp Ala Glu Arg Met Thr Thr Thr
```

```
          50                    55                    60

Cys Asn Ser Arg Lys Met Leu Ala Ser Arg Val Arg Val Thr Ser Glu
   65                    70                    75                    80

Cys His Lys Ser Ser Leu Ser His Cys Leu Ile
                   85                    90
```

<210> 925
<211> 159
<212> PRT
<213> Homo sapiens

<400> 925
```
Asn Ser Ala Arg Ala Gly Gly Arg Ala Val Leu Ser Gly Glu Pro Glu
   1               5                    10                   15

Ala Asn Met Asp Gln Glu Thr Val Gly Asn Val Val Leu Leu Ala Ile
                   20                   25                   30

Val Thr Leu Ile Ser Val Val Gln Asn Gly Phe Phe Ala His Lys Val
              35                   40                   45

Glu His Glu Ser Arg Thr Gln Asn Gly Arg Ser Phe Gln Arg Thr Gly
        50                   55                   60

Thr Leu Ala Phe Glu Arg Val Tyr Thr Ala Asn Gln Asn Cys Val Asp
   65                   70                   75                   80

Ala Tyr Pro Thr Phe Leu Ala Val Leu Trp Ser Ala Gly Leu Leu Cys
                   85                   90                   95

Ser Gln Val Pro Ala Ala Phe Ala Gly Leu Met Tyr Leu Phe Val Arg
                100                  105                  110

Gln Lys Tyr Phe Val Gly Tyr Leu Gly Glu Arg Thr Gln Ser Thr Pro
              115                  120                  125

Gly Tyr Ile Phe Gly Glu Thr His His Thr Leu Pro Val Pro His Val
   130                  135                  140

Arg Cys Trp His Ile Gln Leu Leu Pro His Leu Leu Phe Arg Lys
145                  150                  155
```

<210> 926
<211> 303
<212> PRT

<213> Homo sapiens

<400> 926

```
Gly Ser Leu Ala Ser Pro Pro Ser Leu Gly Ser Met Gly Glu Lys Ser
 1               5                  10                  15

Glu Asn Cys Gly Val Pro Glu Asp Leu Leu Asn Gly Leu Lys Val Thr
            20                  25                  30

Asp Thr Gln Glu Ala Glu Cys Ala Gly Pro Pro Val Pro Asp Pro Lys
        35                  40                  45

Asn Gln His Ser Gln Ser Lys Leu Leu Arg Asp Asp Glu Ala His Leu
    50                  55                  60

Gln Glu Asp Gln Gly Glu Glu Glu Cys Phe His Asp Cys Ser Ala Ser
65                  70                  75                  80

Phe Glu Glu Glu Pro Gly Ala Asp Lys Val Glu Asn Lys Ser Asn Glu
                85                  90                  95

Asp Val Asn Ser Ser Glu Leu Asp Glu Glu Tyr Leu Ile Glu Leu Glu
            100                 105                 110

Lys Asn Met Ser Asp Glu Glu Lys Gln Lys Arg Arg Glu Glu Ser Thr
        115                 120                 125

Arg Leu Lys Glu Glu Gly Asn Glu Gln Phe Lys Lys Gly Asp Tyr Ile
    130                 135                 140

Glu Ala Glu Ser Ser Tyr Ser Arg Ala Leu Glu Met Cys Pro Ser Cys
145                 150                 155                 160

Phe Gln Lys Glu Arg Ser Ile Leu Phe Ser Asn Arg Ala Ala Ala Arg
                165                 170                 175

Met Lys Gln Asp Lys Lys Glu Met Ala Ile Asn Asp Cys Ser Lys Ala
        180                 185                 190

Ile Gln Leu Asn Pro Ser Tyr Ile Arg Ala Ile Leu Arg Arg Ala Glu
    195                 200                 205

Leu Tyr Glu Lys Thr Asp Lys Leu Asp Glu Ala Leu Glu Asp Tyr Lys
    210                 215                 220

Ser Ile Leu Glu Lys Asp Pro Ser Ile His Gln Ala Arg Glu Ala Cys
225                 230                 235                 240

Met Arg Leu Pro Lys Gln Ile Glu Glu Arg Asn Glu Arg Leu Lys Glu
                245                 250                 255
```

```
Glu Met Leu Gly Lys Leu Lys Asp Leu Gly Asn Leu Val Leu Arg Pro
        260             265             270

Phe Gly Leu Ser Thr Glu Asn Phe Gln Ile Lys Gln Asp Ser Ser Thr
        275             280             285

Gly Ser Tyr Ser Ile Asn Phe Val Gln Asn Pro Asn Asn Asn Arg
    290             295             300
```

<210> 927
<211> 329
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 927
```
Xaa Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Arg Gln
 1           5               10              15

Ala Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu
        20              25              30

Val Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala
        35              40              45

Arg Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp
    50              55              60

Phe Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met
65              70              75              80

Lys Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr
            85              90              95

Gly Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr
            100             105             110

Leu Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe
        115             120             125

Thr Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His
    130             135             140

Ile Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val
145             150             155             160
```

```
Tyr Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln
            165             170             175

Asn Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr
            180             185             190

Asn Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly
            195             200             205

Leu Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn
    210             215             220

Ala Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu
225             230             235             240

Asp Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu
            245             250             255

Glu Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu
            260             265             270

Lys Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser
            275             280             285

Ala Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu
            290             295             300

Trp Thr Ser Arg Ser Pro Arg Gln Glu Phe Gln Pro Arg His Leu Ser
305             310             315             320

Thr Leu Ser Cys Met Leu Asn Trp Ala
            325
```

<210> 928
<211> 436
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 928
Lys Arg Phe Leu Arg Asn Phe Lys Leu Leu Thr Lys Arg Glu Phe Trp
 1   5   10   15

Lys Glu Asn Gln Glu His Tyr His Ile Val Gln Lys Phe Leu Ile Leu
                20   25   30

Gly Asp Ile Asp Gly Leu Met Asp Glu Phe Ser Lys Trp Leu Ser Lys
            35   40   45

Ser Arg Asn Asn Leu Pro Gly His Leu Leu Arg Phe Met Thr His Leu
        50   55   60

Ile Leu Phe Phe Arg Thr Leu Gly Leu Gln Thr Lys Glu Glu Val Ser
65   70   75   80

Ile Glu Val Leu Lys Thr Tyr Ile Gln Leu Leu Ile Arg Glu Lys His
                85   90   95

Thr Asn Leu Ile Ala Phe Tyr Thr Cys His Leu Pro Gln Asp Leu Ala
                100   105   110

Val Ala Gln Tyr Ala Leu Phe Leu Glu Ser Val Thr Glu Phe Glu Gln
            115   120   125

Arg His His Cys Leu Glu Leu Ala Lys Glu Ala Asp Leu Asp Val Ala
        130   135   140

Thr Ile Thr Lys Thr Val Val Glu Asn Ile Arg Lys Lys Asp Asn Gly
145   150   155   160

Glu Phe Ser His His Asp Leu Ala Pro Ala Leu Asp Thr Gly Thr Thr
                165   170   175

Glu Glu Asp Arg Leu Lys Ile Asp Val Ile Asp Trp Leu Val Phe Asp
            180   185   190

Pro Ala Gln Arg Ala Glu Ala Leu Lys Gln Gly Asn Ala Ile Met Arg
            195   200   205

Lys Xaa Leu Ala Ser Lys Lys His Xaa Ala Ala Lys Glu Val Phe Val
    210   215   220

Lys Ile Pro Gln Asp Ser Ile Ala Glu Ile Tyr Asn Gln Cys Glu Glu
225   230   235   240

```
Gln Gly Met Glu Ser Pro Leu Pro Ala Glu Asp Asp Asn Ala Ile Arg
                245             250                 255

Glu His Leu Cys Ile Xaa Ala Tyr Leu Glu Ala His Glu Thr Phe Asn
                260             265                 270

Glu Trp Phe Lys His Met Asn Ser Val Pro Gln Lys Pro Ala Leu Ile
        275             280                 285

Pro Gln Pro Thr Phe Thr Glu Lys Val Ala His Glu His Lys Glu Lys
    290             295                 300

Lys Tyr Glu Met Asp Phe Gly Ile Trp Lys Gly His Leu Asp Ala Leu
305             310             315                 320

Thr Ala Asp Val Lys Glu Lys Met Tyr Asn Val Leu Leu Phe Val Asp
                325             330                 335

Gly Gly Trp Met Val Asp Val Arg Glu Asp Ala Lys Glu Asp His Glu
            340             345             350

Arg Thr His Gln Met Val Leu Leu Arg Lys Leu Cys Leu Pro Met Leu
        355             360             365

Cys Phe Leu Leu His Thr Ile Leu His Ser Thr Gly Gln Tyr Gln Glu
    370             375             380

Cys Leu Gln Leu Ala Asp Met Val Ser Ser Glu Arg His Lys Leu Tyr
385             390             395                 400

Leu Val Phe Ser Lys Glu Glu Leu Arg Lys Leu Leu Gln Lys Leu Arg
            405             410                 415

Glu Ser Ser Leu Met Leu Leu Asp Gln Gly Leu Asp Pro Leu Gly Tyr
            420             425                 430

Glu Ile Gln Leu
        435
```

```
<210> 929
<211> 161
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (159)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (282)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 930
Leu Met Lys Ile Glu Ala Asn Xaa Asp His Met Gly Phe His Phe Thr
 1   5   10   15

Thr Gly Xaa Pro Ala Pro Ser Thr Glu Thr Glu Leu Asp Val Leu Leu
            20   25   30

Pro Thr Ala Thr Ser Leu Pro Ile Pro Arg Lys Ser Ala Thr Val Ile
            35   40   45

Pro Glu Ile Glu Gly Ile Lys Ala Glu Ala Lys Ala Leu Asp Asp Met
     50   55   60

Phe Glu Ser Ser Thr Leu Ser Asp Gly Gln Ala Ile Ala Asp Gln Ser
 65   70   75   80

Glu Ile Ile Pro Thr Leu Gly Gln Phe Glu Arg Thr Gln Glu Glu Tyr
                 85   90   95

Glu Asp Lys Lys His Ala Gly Pro Ser Phe Gln Pro Glu Phe Ser Ser
            100   105   110

Gly Ala Glu Glu Ala Leu Val Asp His Thr Pro Tyr Leu Ser Ile Ala
            115   120   125

Thr Thr His Leu Met Asp Gln Ser Val Thr Glu Val Pro Asp Val Met
            130   135   140

Glu Gly Ser Asn Pro Pro Tyr Tyr Thr Asp Thr Thr Leu Ala Val Ser
145   150   155   160

Thr Phe Ala Lys Leu Ser Ser Gln Thr Pro Ser Ser Pro Leu Thr Ile
                165   170   175

Tyr Ser Gly Ser Glu Ala Ser Gly His Thr Glu Ile Pro Gln Pro Ser
            180   185   190

Ala Leu Pro Gly Ile Asp Val Gly Ser Ser Val Met Ser Pro Gln Asp
            195   200   205

Ser Phe Lys Glu Ile His Val Asn Ile Glu Ala Thr Phe Lys Pro Ser
    210   215   220

Ser Glu Glu Tyr Leu His Ile Thr Glu Pro Pro Ser Leu Ser Pro Asp
225   230   235   240

```
Thr Lys Leu Glu Pro Ser Glu Asp Asp Gly Lys Pro Glu Leu Leu Glu
            245                 250                 255

Glu Met Glu Ala Ser Pro Thr Glu Leu Ile Ala Val Glu Gly Thr Glu
            260                 265                 270

Ile Leu Gln Asp Phe Gln Asn Lys Thr Xaa Gly Gln Val Ser Gly Glu
            275                 280                 285

Ala Ile Lys Met Phe Pro Thr Ile Lys Thr Pro Glu Ala Gly Thr Val
    290                 295                 300

Ile Thr Thr Ala Asp Glu Ile Glu Leu Glu Gly Ala Thr Gln Trp Pro
305                 310                 315                 320

His Ser Thr Ser Ala Ser Ala Thr Tyr Gly Val Glu Ala Gly Val Val
            325                 330                 335

Pro Trp Leu Ser Pro Gln Thr Ser Glu Arg Pro Thr Leu Ser Ser Ser
            340                 345                 350

Pro Glu Ile Asn Pro Glu Thr Gln Ala Ala Leu Ile Arg Gly Gln Asp
            355                 360                 365

Ser Thr Ile Ala Ala Ser Glu Gln Gln Val Ala Ala Arg Ile Leu Asp
    370                 375                 380

Ser Asn Asp Gln Ala Thr Val Asn Pro Val Glu Phe Asn Thr Glu Val
385                 390                 395                 400

Ala Thr Pro Pro Phe Ser Leu Leu Glu Thr Ser Asn Glu Thr Asp Phe
            405                 410                 415

Leu Ile Gly Ile Asn Glu Glu Ser Val Glu Gly Thr Ala Ile Tyr Leu
            420                 425                 430

Pro Gly Pro Asp Arg Cys Lys Met Asn Pro Cys Leu Asn Gly Gly Thr
            435                 440                 445

Cys Tyr Pro Thr Glu Thr Ser Tyr Val Cys Thr Cys Val Pro Gly Tyr
    450                 455                 460

Ser Gly Asp Gln Cys Glu Leu Asp Phe Asp Glu Cys His Ser Asn Pro
465                 470                 475                 480

Cys Arg Asn Gly Ala Thr Cys Val Asp Gly Phe Asn Thr Phe Arg Cys
            485                 490                 495

Leu Cys Leu Pro Ser Tyr Val Gly Ala Leu Cys Glu Gln Asp Thr Glu
            500                 505                 510
```

```
Thr Cys Asp Tyr Gly Trp His Lys Phe Gln Gly Gln Cys Tyr Lys Tyr
    515                 520             525

Phe Ala His Arg Arg Thr Trp Asp Ala Ala Glu Arg Glu Cys Arg Leu
    530                 535             540

Gln Gly Ala His Leu Thr Ser Ile Leu Ser His Glu Glu Gln Met Phe
545                 550             555                 560

Val Asn Arg Val Gly His Asp Tyr Gln Trp Ile Gly Leu Asn Asp Lys
                565             570             575

Met Phe Glu His Asp Phe Arg Trp Thr Asp Gly Ser Thr Leu Gln Tyr
            580             585             590

Glu Asn Trp Arg Pro Asn Gln Pro Asp Ser Phe Phe Ser Ala Gly Glu
        595             600             605

Asp Cys Val Val Ile Ile Trp His Glu Asn Gly Gln Trp Asn Asp Val
    610             615             620

Pro Cys Asn Tyr His Leu Thr Tyr Thr Cys Lys Lys Gly Thr Val Ala
625             630             635                 640

Cys Gly Gln Pro Pro Val Val Glu Asn Ala Lys Thr Phe Gly Lys Met
            645             650             655

Lys Pro Arg Tyr Glu Ile Asn Ser Leu Ile Arg Tyr His Cys Lys Asp
            660             665             670

Gly Phe Ile Gln Arg His Leu Pro Thr Ile Arg Cys Leu Gly Asn Gly
        675             680             685

Arg Trp Ala Ile Pro Lys Ile Thr Cys Met Asn Pro Ser Ala Tyr Gln
    690             695             700

Arg Thr Tyr Ser Met Lys Tyr Phe Lys Asn Ser Ser Ser Ala Lys Asp
705             710             715                 720

Asn Ser Ile Asn Thr Ser Lys His Asp His Arg Trp Ser Arg Arg Trp
                725             730             735

Gln Glu Ser Arg Arg
                740
```

<210> 931
<211> 209
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 931
Gly Lys Ala Gly Asp Gln Leu Val Pro Asp Asn Leu Lys Glu Thr Asp
 1               5                  10                  15

Lys Glu Lys Gly Asn Val Val Leu Lys Gly Glu Xaa Ser Ala Arg Met
            20                  25                  30

Lys Ile Pro Ser Asn Met Trp Val Glu Ala Trp Glu Thr Ala Lys Pro
            35                  40                  45

Ile Pro Ala Arg Arg Gln Arg Arg Leu Phe Asp Asp Thr Arg Glu Ala
        50                  55                  60

Glu Lys Val Leu His Tyr Leu Ala Ile Gln Lys Pro Ala Asp Leu Ala
65                  70                  75                  80

Arg His Leu Leu Pro Cys Val Ile His Ala Ala Val Leu Lys Val Lys
                85                  90                  95

Glu Glu Glu Ser Leu Glu Asn Ile Ser Ser Val Lys Lys Ile Ile Lys
            100                 105                 110

Gln Ile Ile Ser His Ser Ser Lys Val Leu His Phe Pro Asn Pro Glu
            115                 120                 125

Asp Lys Lys Leu Glu Glu Ile Ile His Gln Ile Thr Asn Val Glu Ala
    130                 135                 140

Leu Ile Ala Arg Ala Arg Ser Leu Lys Ala Lys Phe Gly Thr Glu Lys
145                 150                 155                 160

Cys Glu Gln Glu Glu Glu Lys Glu Asp Leu Glu Arg Phe Val Ser Cys
                165                 170                 175

Leu Leu Glu Gln Pro Glu Val Leu Val Thr Gly Ala Gly Arg Gly His
            180                 185                 190

Ala Gly Arg Ile Ile His Lys Leu Phe Val Asn Ala Gln Arg Cys Gln
            195                 200                 205

Leu
```

887

<210> 932
<211> 57
<212> PRT
<213> Homo sapiens

<400> 932
Leu Leu Glu Val Pro Glu Met Gly Leu Thr Phe Ile Lys Gln Ile Ala
 1   5   10   15

Tyr Tyr Asp Leu Ala Ala Ala Thr Val Gln Leu His Ile Asn Ser Thr
            20   25   30

Asp Gln Thr Ile Cys Ile Trp His His Leu Leu Thr His Asp Met Arg
        35   40   45

Leu Phe Cys Ile Asn Cys Tyr Asp Gly
    50   55

<210> 933
<211> 125
<212> PRT
<213> Homo sapiens

<400> 933
Ile Lys Glu Glu Ser Asp Tyr His Asp Leu Glu Ser Val Val Gln Gln
 1   5   10   15

Val Glu Gln Asn Leu Glu Leu Met Thr Lys Arg Ala Val Lys Ala Glu
            20   25   30

Asn His Val Val Lys Leu Lys Gln Glu Ile Ser Leu Leu Gln Ala Gln
        35   40   45

Val Ser Asn Phe Gln Arg Glu Asn Glu Ala Leu Arg Cys Gly Gln Gly
    50   55   60

Ala Ser Leu Thr Val Val Lys Gln Asn Ala Asp Val Ala Leu Gln Asn
65   70   75   80

Leu Arg Val Val Met Asn Ser Ala Gln Ala Ser Ile Lys Gln Leu Val
                85   90   95

Ser Gly Ala Glu Thr Leu Asn Leu Val Ala Glu Ile Leu Lys Ser Ile
            100   105   110

Asp Arg Ile Ser Glu Val Lys Asp Glu Glu Glu Asp Ser
        115   120   125

888

<210> 934
<211> 306
<212> PRT
<213> Homo sapiens

<400> 934
Pro Thr Phe Ser Arg Ala Val Ala Thr Met Phe Ser Arg Ala Gly Val
 1   5   10   15

Ala Gly Leu Ser Ala Trp Thr Leu Gln Pro Gln Trp Ile Gln Val Arg
            20   25   30

Asn Met Ala Thr Leu Lys Asp Ile Thr Arg Arg Leu Lys Ser Ile Lys
            35   40   45

Asn Ile Gln Lys Ile Thr Lys Ser Met Lys Met Val Ala Ala Ala Lys
        50   55   60

Tyr Ala Arg Ala Glu Arg Glu Leu Lys Pro Ala Arg Ile Tyr Gly Leu
65   70   75   80

Gly Ser Leu Ala Leu Tyr Glu Lys Ala Asp Ile Lys Gly Pro Glu Asp
                85   90   95

Lys Lys Lys His Leu Leu Ile Gly Val Ser Ser Asp Arg Gly Leu Cys
            100   105   110

Gly Ala Ile His Ser Ser Ile Ala Lys Gln Met Lys Ser Glu Val Ala
            115   120   125

Thr Leu Thr Ala Ala Gly Lys Glu Val Met Leu Val Gly Ile Gly Asp
    130   135   140

Lys Ile Arg Gly Ile Leu Tyr Arg Thr His Ser Asp Gln Phe Leu Val
145   150   155   160

Ala Phe Lys Glu Val Gly Arg Lys Pro Pro Thr Phe Gly Asp Ala Ser
            165   170   175

Val Ile Ala Leu Glu Leu Leu Asn Ser Gly Tyr Glu Phe Asp Glu Gly
            180   185   190

Ser Ile Ile Phe Asn Lys Phe Arg Ser Val Ile Ser Tyr Lys Thr Glu
            195   200   205

Glu Lys Pro Ile Phe Ser Leu Asn Thr Val Ala Ser Ala Asp Ser Met
        210   215   220

Ser Ile Tyr Asp Asp Ile Asp Ala Asp Val Leu Gln Asn Tyr Gln Glu
225   230   235   240

```
Tyr Asn Leu Ala Asn Ile Ile Tyr Tyr Ser Leu Lys Glu Ser Thr Thr
            245              250              255

Ser Glu Gln Ser Ala Arg Met Thr Ala Met Asp Asn Ala Ser Lys Asn
            260              265              270

Ala Ser Glu Met Ile Asp Lys Leu Thr Leu Thr Phe Asn Arg Thr Arg
            275              280              285

Gln Ala Val Ile Thr Lys Glu Leu Ile Glu Ile Ile Ser Gly Ala Ala
            290              295              300

Ala Leu
305
```

```
<210> 935
<211> 135
<212> PRT
<213> Homo sapiens

<400> 935
Gly Ala Leu Cys Ala Ala Ser Val Pro Arg Cys Val Trp Ser Ser Ala
 1               5               10              15

Gly Val Val Ala Leu Phe Glu Glu His Cys Ala Pro Leu Val Trp Val
            20              25              30

Tyr Thr Tyr Glu Cys Cys His Tyr Met Cys Ser Ala Leu Leu Ser Leu
            35              40              45

Ser Cys Pro Cys Pro Ala Pro Ser Glu Arg Ala Ala Gly Leu Cys Cys
     50              55              60

Arg Leu Val Val Pro Cys His Lys Gly Met Pro Arg Leu Thr Asp Leu
65              70              75              80

Ser Val Lys Thr Lys Asp Val Trp Glu Ile Pro Arg Glu Ser Leu Gln
            85              90              95

Leu Ile Lys Arg Leu Gly Asn Gly Gln Phe Gly Glu Val Trp Met Gly
            100             105             110

Met Leu Arg Leu Asn Tyr Ser Leu Ile Ser Phe Pro Val Trp Lys Ile
            115             120             125

Pro Asn Thr Lys Asp Gly Arg
            130             135
```

890

<210> 936
<211> 284
<212> PRT
<213> Homo sapiens

<400> 936
Leu Ser Gly Thr Thr Tyr Ala Arg Ala Cys Arg Ser Gln Cys Ala Ser
 1   5   10   15

Ala Ala Gly Gly Cys Thr Gly Gly Ala Gly Gly Gly Gly Gly Gly Gly
             20   25   30

Gly Gly Trp Gly Gly Ala Gly Gly Lys Cys Cys Asp Ala Val Pro Gly
             35   40   45

Arg Gly Arg Arg Val Glu Ala Glu Tyr Gln Phe Pro Ser Gly Lys Ala
         50   55   60

Ala Met Ala Ile Phe Ser Val Tyr Val Val Asn Lys Ala Gly Gly Leu
65   70   75   80

Ile Tyr Gln Leu Asp Ser Tyr Ala Pro Arg Ala Glu Ala Glu Lys Thr
                 85   90   95

Phe Ser Tyr Pro Leu Asp Leu Leu Leu Lys Leu His Asp Glu Arg Val
             100   105   110

Leu Val Ala Phe Gly Gln Arg Asp Gly Ile Arg Val Gly His Ala Val
         115   120   125

Leu Ala Ile Asn Gly Met Asp Val Asn Gly Arg Tyr Thr Ala Asp Gly
     130   135   140

Lys Glu Val Leu Glu Tyr Leu Gly Asn Pro Ala Asn Tyr Pro Val Ser
145   150   155   160

Ile Arg Phe Gly Arg Pro Arg Leu Thr Ser Asn Glu Lys Leu Met Leu
                 165   170   175

Ala Ser Met Phe His Ser Leu Phe Ala Ile Gly Ser Gln Leu Ser Pro
             180   185   190

Glu Gln Gly Ser Ser Gly Ile Glu Met Leu Glu Thr Asp Thr Phe Lys
             195   200   205

Leu His Cys Tyr Gln Thr Leu Thr Gly Ile Lys Phe Val Val Leu Ala
     210   215   220

Asp Pro Arg Gln Ala Gly Ile Asp Ser Leu Leu Arg Lys Ile Tyr Glu

891

```
       225                   230                   235                   240

    Ile Tyr Ser Asp Phe Ala Leu Lys Asn Pro Phe Tyr Ser Leu Glu Met
                245                   250                   255

    Pro Ile Arg Cys Glu Leu Phe Asp Gln Asn Leu Lys Leu Ala Leu Glu
                260                   265                   270

    Val Ala Glu Lys Ala Gly Thr Phe Gly Pro Gly Ser
                275                   280
```

<210> 937
<211> 338
<212> PRT
<213> Homo sapiens

<400> 937

```
    Pro Val Ser Pro Leu His Arg Glu Glu Gly Asp Lys Trp Gly Glu Val
     1               5                   10                  15

    Trp Cys Gln Met Gly Trp Arg Arg Lys Arg Val Pro Gln Arg Gly Arg
                20                  25                  30

    Lys Ala Pro Pro Pro Gln Leu His Gly Asn Ile Asn Asn Leu Tyr Phe
                35                  40                  45

    Pro Ile Arg Trp Arg Asp Arg Leu His Trp Asp Ser Pro Asn Pro Ala
     50                  55                  60

    Ala Glu Cys Gln Arg Pro Arg Ser Thr Leu Val Ser Arg Lys Pro Gly
     65                  70                  75                  80

    Pro Gly Arg Ile Thr Trp Asp Glu Leu Ala Ala Ser Gly Leu Pro Ser
                85                  90                  95

    Cys Asp Ala Ala Val Asn Leu Ala Gly Glu Asn Ile Leu Asn Pro Leu
                100                 105                 110

    Arg Arg Trp Asn Glu Thr Phe Gln Lys Glu Val Leu Gly Ser Arg Leu
                115                 120                 125

    Glu Thr Thr Gln Leu Leu Ala Lys Ala Ile Thr Lys Ala Pro Gln Pro
                130                 135                 140

    Pro Lys Ala Trp Val Leu Val Thr Gly Val Ala Tyr Tyr Gln Pro Ser
     145                 150                 155                 160

    Leu Thr Ala Glu Tyr Asp Glu Asp Ser Pro Gly Gly Asp Phe Asp Phe
                165                 170                 175
```

```
Phe Ser Asn Leu Val Thr Lys Trp Glu Ala Ala Ala Arg Leu Pro Gly
        180             185             190

Asp Ser Thr Arg Gln Val Val Val Arg Ser Gly Val Val Leu Gly Arg
        195             200             205

Gly Gly Gly Ala Met Gly His Met Leu Leu Pro Phe Arg Leu Gly Leu
210             215             220

Gly Gly Pro Ile Gly Ser Gly His Gln Phe Phe Pro Trp Ile His Ile
225             230             235             240

Gly Asp Leu Ala Gly Ile Leu Thr His Ala Leu Glu Ala Asn His Val
            245             250             255

His Gly Val Leu Asn Gly Val Ala Pro Ser Ser Ala Thr Asn Ala Glu
        260             265             270

Phe Ala Gln Thr Phe Gly Ala Ala Leu Gly Arg Arg Ala Phe Ile Pro
        275             280             285

Leu Pro Ser Ala Val Val Gln Ala Val Phe Gly Arg Gln Arg Ala Ile
        290             295             300

Met Leu Leu Glu Gly Gln Lys Val Ile Pro Arg Arg Thr Leu Ala Thr
305             310             315             320

Gly Tyr Gln Tyr Ser Phe Pro Glu Leu Gly Ala Ala Leu Lys Glu Ile
            325             330             335

Val Ala
```

<210> 938
<211> 321
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (220)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (238)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (267)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (268)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 938
Cys Gln Glu Trp Val Pro Asp Arg Glu Ser Tyr Val Ser His Met Lys
 1               5                  10                  15

Lys Ser His Gly Arg Thr Leu Lys Arg Tyr Pro Cys Arg Gln Xaa Glu
            20              25                  30

Gln Ser Phe His Thr Pro Asn Ser Leu Arg Lys His Ile Arg Asn Asn
            35              40                  45

His Asp Thr Val Lys Lys Phe Tyr Thr Cys Gly Tyr Cys Thr Glu Asp
     50              55                  60

Ser Pro Ser Phe Pro Arg Pro Ser Leu Leu Glu Ser His Ile Ser Leu
 65              70                  75                      80

Met His Gly Ile Arg Asn Pro Asp Leu Ser Gln Thr Ser Lys Val Lys
                85                  90                  95

Pro Pro Gly Gly His Ser Pro Gln Val Asn His Leu Lys Arg Pro Val
            100                 105                 110
```

```
Ser Gly Val Gly Asp Ala Pro Gly Thr Ser Asn Gly Ala Thr Val Ser
        115                 120                 125

Ser Thr Lys Arg His Lys Ser Leu Phe Gln Cys Ala Lys Cys Ser Phe
        130                 135                 140

Ala Thr Asp Ser Gly Leu Glu Phe Gln Ser His Ile Pro Gln His Gln
145                 150                 155                 160

Val Gly Gln Xaa His Ser Pro Met Ser Pro Leu Trp Phe Val Leu His
                165                 170                 175

Leu Cys Gln Leu Pro Gln Pro Pro Leu His Cys Pro Gln Gly Glu
            180             185                 190

Arg Pro Gly Gly Gly Gly Arg Gly Gly Gly Thr Glu Met Ala
        195                 200                 205

Val Glu Val Ala Glu Gln Arg Arg Ala Pro Gly Xaa Xaa Cys Pro Trp
        210                 215                 220

Arg Leu Glu Arg Met Asp Trp Lys Asn Val Pro Val Ser Xaa Cys Gln
225                 230                 235                 240

Leu Thr Gln Arg Arg Gly Asp Cys Trp Ala Arg Pro Leu Arg Thr Met
                245                 250                 255

Val Ala Thr Met Ile Thr Xaa Asn His Arg Xaa Xaa Arg Thr Arg Thr
                260                 265                 270

Ala Thr His Cys Pro Leu Arg Cys Asp Arg Arg Leu Cys Ser Val His
            275                 280                 285

Gly Gln Gly Trp Cys Arg Ser Val Phe His Leu Pro Cys Gly Pro Trp
        290                 295                 300

Lys Ile Lys Gly Ser Ala Pro Ser Val Ser Val Thr Gly Cys Thr Leu
305                 310                 315                 320

Glu
```

<210> 939
<211> 151
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 939
Ala Ala Ser Xaa Gly Glu Gln Arg Glu Arg Ala Arg Leu Gln Thr Pro
 1   5   10   15

Thr Arg Pro His Ser Thr Ser Ala Arg Pro Arg Arg Arg Gln Val Gln
            20   25   30

Leu Leu Gln Leu Cys Gly Cys Ala Ala Lys Gly Xaa Ala His Gly Leu
         35   40   45

Asp Val Thr Ser Pro Thr Val Ser Trp Leu Ala Cys Pro Cys Ala Arg
    50   55   60

Pro Ser Xaa Ser Arg Gln Xaa Leu Gly Thr Ser Glu Glu Glu Pro Gly
65   70   75   80

Xaa Asn Gly Lys Gly Gly Ile Gly Val His His Ser Leu Leu Leu Trp
                85   90   95

Ser Ser Thr Gly Gly Thr Xaa Met Glu Val Ser Cys Leu Thr Ser Leu
            100   105   110

```
His Cys Thr Gly Pro Gly Met Pro Ile His Pro Leu Ala Glu Asp Thr
         115             120             125

His Gln Val Ile Cys Glu Glu Thr Leu Gly Ser His His Leu Lys Ala
    130             135             140

Arg Gly Ser Pro Ser His Arg
145             150
```

<210> 940
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 940

```
Arg Cys Gly Trp Ser Ser Arg Ser Arg Arg Ser Arg Cys Ala Arg Arg
  1             5               10              15

Cys Pro Pro Ser Pro Cys Pro Thr Pro Arg His Val Pro Ser Ser Arg
            20              25              30

His Pro Glu Val Cys Gly Leu Arg Thr Asn Ser His Arg Cys Leu Phe
         35              40              45

Arg Pro Gln Leu Gln Ala Met Pro Ala Ala Gly Gly Val Leu Tyr Gln
    50              55              60

Pro Ser Gly Pro Ala Ser Phe Pro Ser Thr Phe Ser Pro Ala Gly Ser
65              70              75              80

Val Glu Gly Ser Pro Met His Gly Val Tyr Met Ser Gln Pro Val Pro
            85              90              95

Ala Ala Gly Pro Tyr Pro Xaa
            100
```

<210> 941
<211> 136
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 941
Thr Ala Gly Arg Ser Asp Val Leu Pro Val Ala Gly Gly Glu Val Arg
 1               5                  10                  15

Ala Leu Gln Glu Gly Gly Cys Gly Asp Lys Met Lys Ile Phe Val Gly
                20                  25                  30

Asn Val Asp Gly Ala Asp Thr Thr Pro Glu Glu Leu Ala Ala Leu Phe
                35                  40                  45

Ala Pro Tyr Gly Thr Val Met Ser Cys Ala Val Met Lys Gln Phe Ala
        50                  55                  60

Phe Val His Met Arg Glu Asn Ala Gly Ala Leu Arg Ala Ile Glu Ala
65              70                  75                  80

Leu His Gly His Glu Leu Arg Pro Gly Arg Ala Leu Val Val Glu Met
                85                  90                  95

Ser Arg Pro Arg Pro Leu Asn Thr Trp Lys Ile Phe Val Gly Asn Val
            100                 105                 110

Ser Ala Ala Cys Thr Ser Gln Glu Leu Arg Xaa Ser Ser Ser Ala Ala
            115                 120                 125

Asp Ala Ser Ser Ser Val Thr Trp
        130                 135


<210> 942
<211> 61
<212> PRT
<213> Homo sapiens

<400> 942
Ile Met Lys Glu Ser Ser Ser Val Leu Ala Lys Cys Ser Ser Ile Ala
 1               5                  10                  15

Gly Tyr Ile Gln Trp Ser Ser Ile Asn Ser Tyr Leu Ser Gly Leu Asn
                20                  25                  30

Gln Asn Cys Val Ser Leu Asn Ser Tyr His Thr Glu Gly Ala Ser Gln
            35                  40                  45

Ile Thr Ile Phe Leu Ser Ala Val Phe Leu Gln Lys Ser
        50                  55                  60
```

```
<210> 943
<211> 580
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 943
Gly Ala Gln Ala Gln Ala Ser Ala Arg Pro Leu Gln Ala Phe Gly Ala
 1               5                  10                  15

Arg Ala Arg Leu Gly Tyr Gly Pro Gly Arg Arg Arg Pro Pro Ser Ala
            20                  25                  30

Arg Cys Leu Ser Gly Thr Ala Asn Arg Arg Glu Arg Arg Arg Val Gly
            35                  40                  45

Leu Ser Ala Xaa Leu Gly Ala Gly Ala His Ala Arg Ala Pro Pro Gln
    50                  55                  60

Ala Gly Ala Met Ala Ser Gly Ser Xaa Ala Glu Cys Leu Gln Gln Glu
65                  70                  75                  80

Thr Thr Cys Pro Val Cys Leu Gln Tyr Phe Ala Glu Pro Met Met Leu
            85                  90                  95

Asp Cys Gly His Asn Ile Cys Cys Ala Cys Leu Ala Arg Cys Trp Gly
            100                 105                 110

Thr Ala Glu Thr Asn Val Ser Cys Pro Gln Cys Arg Glu Thr Phe Pro
            115                 120                 125

Gln Arg His Met Arg Pro Asn Arg His Leu Ala Asn Val Thr Gln Leu
    130                 135                 140

Val Lys Gln Leu Arg Thr Glu Arg Pro Ser Gly Pro Gly Gly Glu Met
145                 150                 155                 160

Gly Val Cys Glu Lys His Arg Glu Pro Leu Lys Leu Tyr Cys Glu Glu
                165                 170                 175
```

```
Asp Gln Met Pro Ile Cys Val Val Cys Asp Arg Ser Arg Glu His Arg
        180                 185                 190

Gly His Ser Val Leu Pro Leu Glu Glu Ala Val Glu Gly Phe Lys Glu
        195                 200                 205

Gln Ile Gln Asn Gln Leu Asp His Leu Lys Arg Val Lys Asp Leu Lys
    210                 215                 220

Lys Arg Arg Arg Ala Gln Gly Glu Gln Ala Arg Ala Glu Leu Leu Ser
225             230                 235                 240

Leu Thr Gln Met Glu Arg Glu Lys Ile Val Trp Glu Phe Glu Gln Leu
            245                 250                 255

Tyr His Ser Leu Lys Glu His Glu Tyr Arg Leu Leu Ala Arg Leu Glu
            260                 265                 270

Glu Leu Asp Leu Ala Ile Tyr Asn Ser Ile Asn Gly Ala Ile Thr Gln
        275                 280                 285

Phe Ser Cys Asn Ile Ser His Leu Ser Ser Leu Ile Ala Gln Leu Glu
    290                 295                 300

Glu Lys Gln Gln Gln Pro Thr Arg Glu Leu Leu Gln Asp Ile Gly Asp
305             310                 315                 320

Thr Leu Ser Arg Ala Glu Arg Ile Arg Ile Pro Glu Pro Trp Ile Thr
            325                 330                 335

Pro Pro Asp Leu Gln Glu Lys Ile His Ile Phe Ala Gln Lys Cys Leu
        340                 345                 350

Phe Leu Thr Glu Ser Leu Lys Gln Phe Thr Glu Lys Met Gln Ser Asp
        355                 360                 365

Met Glu Lys Ile Gln Glu Leu Arg Glu Ala Gln Leu Tyr Ser Val Asp
    370                 375                 380

Val Thr Leu Asp Pro Asp Thr Ala Tyr Pro Ser Leu Ile Leu Ser Asp
385             390                 395                 400

Asn Leu Arg Gln Val Arg Tyr Ser Tyr Leu Gln Gln Asp Leu Pro Asp
            405                 410                 415

Asn Pro Glu Arg Phe Asn Leu Phe Pro Cys Val Leu Gly Ser Pro Cys
        420                 425                 430

Phe Ile Ala Gly Arg His Tyr Trp Glu Val Glu Val Gly Asp Lys Ala
        435                 440                 445
```

```
Lys Trp Thr Ile Gly Val Cys Glu Asp Ser Val Cys Arg Lys Gly Gly
    450             455             460

Val Thr Ser Ala Pro Gln Asn Gly Phe Trp Ala Val Ser Leu Trp Tyr
465             470             475             480

Gly Lys Glu Tyr Trp Ala Leu Thr Ser Pro Met Thr Ala Leu Pro Leu
            485             490             495

Arg Thr Pro Leu Gln Arg Val Gly Ile Phe Leu Asp Tyr Asp Ala Gly
            500             505             510

Glu Val Ser Phe Tyr Asn Val Thr Glu Arg Cys His Thr Phe Thr Phe
        515             520             525

Ser His Ala Thr Phe Cys Gly Pro Val Arg Pro Tyr Phe Ser Leu Ser
    530             535             540

Tyr Ser Gly Gly Lys Ser Ala Ala Pro Leu Ile Ile Cys Pro Met Ser
545             550             555             560

Gly Ile Asp Gly Phe Ser Gly His Val Gly Asn His Gly His Ser Met
            565             570             575

Glu Thr Ser Pro
            580
```

```
<210> 944
<211> 437
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (317)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 944
```

901

```
Ser Ala Thr Gly Ser Gly Glu Lys Glu Cys Gly Val Thr Ala Thr Phe
1               5               10                  15

Asp Ala Ser Arg Thr Thr Phe Thr Arg Glu Gly Ser Phe Arg Val Thr
            20              25                  30

Thr Ala Thr Glu Gln Ala Glu Arg Glu Glu Ile Met Lys Gln Met Gln
        35              40                  45

Asp Ala Lys Lys Ala Glu Thr Asp Lys Ile Val Val Gly Ser Ser Val
    50                  55                  60

Ala Pro Gly Xaa Thr Ala Pro Ser Pro Ser Ser Pro Thr Ser Pro Thr
65              70                  75                  80

Ser Asp Ala Thr Thr Ser Leu Glu Met Asn Asn Pro His Ala Ile Pro
            85                  90                  95

Arg Arg His Ala Pro Ile Glu Gln Leu Ala Arg Gln Gly Ser Phe Arg
            100             105                 110

Gly Phe Pro Ala Leu Ser Gln Lys Met Ser Pro Phe Lys Arg Gln Leu
    115             120                 125

Ser Leu Arg Ile Asn Glu Leu Pro Ser Thr Met Gln Arg Lys Thr Asp
    130             135                 140

Phe Pro Ile Lys Asn Ala Val Pro Glu Val Glu Gly Glu Ala Glu Ser
145             150                 155                 160

Ile Ser Ser Leu Cys Xaa Gln Ile Thr Asn Ala Phe Ser Thr Pro Glu
            165                 170                 175

Asp Pro Phe Ser Ser Ala Pro Met Thr Lys Pro Val Thr Val Val Ala
            180             185                 190

Pro Gln Ser Pro Thr Phe Gln Gly Thr Glu Trp Gly Gln Ser Ser Gly
    195             200                 205

Ala Ala Ser Pro Gly Leu Phe Gln Ala Gly His Arg Arg Thr Pro Ser
    210             215                 220

Glu Ala Asp Arg Trp Leu Glu Glu Val Ser Lys Ser Val Arg Ala Gln
225             230                 235                 240

Gln Pro Gln Ala Ser Ala Ala Pro Leu Gln Pro Val Leu Gln Pro Pro
            245                 250                 255

Pro Pro Thr Ala Ile Ser Gln Pro Ala Ser Pro Phe Gln Gly Asn Ala
            260                 265                 270
```

```
Phe Leu Thr Ser Gln Pro Val Pro Val Gly Val Val Pro Ala Leu Gln
        275             280             285

Pro Ala Phe Val Pro Ala Gln Ser Tyr Pro Val Ala Asn Gly Met Pro
        290             295             300

Tyr Pro Ala Pro Asn Val Pro Val Val Gly Ile Thr Xaa Ser Gln Met
305             310             315             320

Val Ala Asn Val Phe Gly Thr Ala Gly His Pro Gln Ala Ala His Pro
            325             330             335

His Gln Ser Pro Ser Leu Val Arg Gln Gln Thr Phe Pro His Tyr Glu
        340             345             350

Ala Ser Ser Ala Thr Thr Ser Pro Phe Phe Lys Pro Pro Ala Gln His
        355             360             365

Leu Asn Gly Ser Ala Ala Phe Asn Gly Val Asp Asp Gly Arg Leu Ala
    370             375             380

Ser Ala Asp Arg His Thr Glu Val Pro Thr Gly Thr Cys Pro Val Asp
385             390             395             400

Pro Phe Glu Ala Gln Trp Ala Ala Leu Glu Asn Lys Ser Lys Gln Arg
            405             410             415

Thr Asn Pro Ser Pro Thr Asn Pro Phe Ser Ser Asp Leu Gln Lys Thr
        420             425             430

Phe Glu Ile Glu Leu
        435
```

<210> 945
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 945
```
His Gly Ser Met Arg Arg Leu Leu Ile Pro Leu Ala Leu Trp Leu Gly
  1           5               10              15

Ala Val Gly Val Gly Val Ala Glu Leu Thr Glu Ala Gln Arg Arg Gly
        20              25              30
```

903

```
Leu Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp
        35              40              45

Ala Phe Gln Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro
        50              55              60

Ala Gly Ile Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys
65              70              75              80

Arg Lys Arg Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly
                85              90              95

Arg Lys Arg Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys
        100             105             110

Val Leu Gly Arg Leu Val Xaa Cys Pro Ile Glu Thr Gln Val Leu Arg
        115             120             125

Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser
    130             135             140

Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu Pro Arg Ser
145             150             155             160
```

```
<210> 946
<211> 221
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (198)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 946
Gly Gly Asp Pro Pro Gly Asp Leu Ser Ser Leu Ser Ser Lys Leu Leu
 1               5              10              15

Pro Gly Phe Thr Thr Leu Gly Phe Lys Asp Glu Arg Arg Asn Lys Val
        20              25              30

Thr Phe Leu Ser Ser Ala Thr Thr Ala Leu Ser Met Gln Asn Asn Ser
        35              40              45

Val Phe Gly Asp Leu Lys Ser Asp Glu Met Glu Leu Leu Tyr Ser Ala
```

```
            50                      55                      60

Tyr Gly Asp Glu Thr Gly Val Gln Cys Ala Leu Ser Leu Gln Glu Phe
 65                 70              75                      80

Val Lys Asp Ala Gly Ser Tyr Ser Lys Lys Val Val Asp Asp Leu Leu
                85              90                      95

Asp Gln Ile Thr Gly Gly Asp His Ser Arg Thr Leu Phe Gln Leu Lys
            100             105                     110

Gln Arg Arg Asn Val Pro Met Lys Pro Pro Asp Glu Ala Lys Val Gly
        115             120                     125

Asp Thr Leu Gly Asp Ser Ser Ser Ser Val Leu Glu Phe Met Ser Met
    130             135             140

Lys Ser Tyr Pro Asp Val Ser Val Asp Ile Ser Met Leu Ser Ser Leu
145             150             155                     160

Gly Lys Val Lys Lys Glu Leu Asp Pro Asp Asp Ser His Leu Asn Leu
            165             170                     175

Asp Glu Thr Thr Lys Leu Leu Gln Asp Leu His Glu Ala Gln Ala Asp
            180             185             190

Ala Ala Ala Leu Gly Xaa Arg Pro Thr Ser Ala Pro Cys Pro Thr Pro
        195             200             205

Pro Arg Gly Thr Ser Thr Thr Trp Glu Ala Leu Leu Ala
    210             215             220
```

<210> 947
<211> 316
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (293)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (312)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 947
Glu Gln Tyr Val Cys Ala Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys

905

```
        1                      5                          10                            15

      Lys Met Ala Thr Arg Lys Ile Ser Val Ile Thr Ile Phe Gly Pro Val
              20                      25                      30

      Asn Asn Ser Thr Met Lys Ile Asp His Phe Gln Leu Asp Asn Glu Lys
              35                      40                      45

      Pro Met Arg Val Val Asp Asp Glu Asp Leu Val Asp Gln Arg Leu Ile
              50                      55                      60

      Ser Glu Leu Arg Lys Glu Tyr Gly Met Thr Tyr Asn Asp Phe Phe Met
      65                      70                      75                      80

      Val Leu Thr Asp Val Asp Leu Arg Val Lys Gln Tyr Tyr Glu Val Pro
                      85                      90                      95

      Ile Thr Met Lys Ser Val Phe Asp Leu Ile Asp Thr Phe Gln Ser Arg
                  100                     105                     110

      Ile Lys Asp Met Glu Lys Gln Lys Lys Glu Gly Ile Val Cys Lys Glu
                  115                     120                     125

      Asp Lys Lys Gln Ser Leu Glu Asn Phe Leu Ser Arg Phe Arg Trp Arg
                  130                     135                     140

      Arg Arg Leu Leu Val Ile Ser Ala Pro Asn Asp Glu Asp Trp Ala Tyr
      145                     150                     155                     160

      Ser Gln Gln Leu Ser Ala Leu Ser Gly Gln Ala Cys Asn Phe Gly Leu
                      165                     170                     175

      Arg His Ile Thr Ile Leu Lys Leu Leu Gly Val Gly Glu Glu Val Gly
                  180                     185                     190

      Gly Val Leu Glu Leu Phe Pro Ile Asn Gly Ser Ser Val Val Glu Arg
                  195                     200                     205

      Glu Asp Val Pro Ala His Leu Val Lys Asp Ile Arg Asn Tyr Phe Gln
                  210                     215                     220

      Val Ser Pro Glu Tyr Phe Ser Met Leu Leu Val Gly Lys Asp Gly Asn
      225                     230                     235                     240

      Val Lys Ser Trp Tyr Pro Ser Pro Met Trp Ser Met Val Ile Val Tyr
                      245                     250                     255

      Asp Leu Ile Asp Ser Met Gln Leu Arg Arg Gln Glu Met Ala Ile Gln
                  260                     265                     270

      Gln Ser Leu Gly Met Arg Cys Pro Glu Asp Glu Tyr Ala Gly Tyr Gly
```

906

```
        275              280              285
Tyr His Ser Tyr Xaa Gln Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr
    290              295              300

Arg His His Glu Ser Tyr His Xaa Gly Tyr Pro Tyr
305              310              315


<210> 948
<211> 162
<212> PRT
<213> Homo sapiens

<400> 948
Ser Thr His Ala Ser Ala His Ala Ser Gly Lys Gln Cys Gln Asp Ser
  1           5              10              15

Lys Asp Ser Asn His Leu Pro Lys Met Ser Leu Ser Ala Phe Thr Leu
            20              25              30

Phe Leu Ala Leu Ile Gly Gly Thr Ser Gly Gln Tyr Tyr Asp Tyr Asp
        35              40              45

Phe Pro Leu Ser Ile Tyr Gly Gln Ser Ser Pro Asn Cys Ala Pro Glu
    50              55              60

Cys Asn Cys Pro Glu Ser Tyr Pro Ser Ala Met Tyr Cys Asp Glu Leu
65              70              75              80

Lys Leu Lys Ser Val Pro Met Val Pro Pro Gly Ile Lys Tyr Leu Tyr
            85              90              95

Leu Arg Asn Asn Gln Ile Asp His Ile Asp Glu Lys Ala Phe Glu Asn
            100             105             110

Val Thr Asp Leu Gln Trp Leu Ile Leu Asp His Asn Leu Leu Glu Asn
            115             120             125

Ser Lys Ile Lys Gly Arg Val Phe Ser Lys Leu Lys Gln Leu Lys Lys
            130             135             140

Leu His Ile Asn His Asn Asn Leu Thr Glu Ser Val Gly Pro Leu Pro
145             150             155             160

Lys Ser
```

907

```
<210> 949
<211> 185
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 949
Leu Gly Phe Asn Tyr Tyr Tyr Lys Tyr Ser Asn Glu Gly Asp Ser His
 1               5                  10                  15

Leu Gly Gly Gly Ser Arg Glu Gly Ser Phe Lys Glu Thr Ile Thr Leu
            20                  25                  30

Lys Trp Cys Thr Pro Arg Thr Asn Asn Ile Glu Leu His Tyr Cys Thr
        35                  40                  45

Gly Ala Tyr Arg Ile Ser Pro Val Asp Val Asn Ser Arg Pro Ser Ser
    50                  55                  60

Cys Leu Thr Asn Phe Leu Leu Asn Gly Arg Ser Val Leu Leu Glu Gln
65                  70                  75                  80

Pro Arg Lys Ser Gly Ser Lys Val Ile Ser His Met Leu Ser Ser His
            85                  90                  95

Gly Gly Glu Ile Phe Leu His Val Leu Ser Ser Ser Arg Ser Ile Leu
            100                 105                 110

Glu Xaa Pro Pro Ser Ile Ser Glu Gly Cys Gly Gly Arg Val Thr Asp
        115                 120                 125

Tyr Arg Ile Thr Asp Phe Gly Glu Phe Met Arg Glu Asn Arg Leu Thr
    130                 135                 140

Pro Phe Leu Asp Pro Arg Tyr Lys Ile Asp Gly Ser Leu Glu Val Pro
145                 150                 155                 160

Leu Glu Arg Ala Lys Asp Gln Leu Glu Lys His Thr Arg Tyr Trp Pro
                165                 170                 175

Met Asp His Phe Thr Asn His His Phe
            180                 185


<210> 950
<211> 169
```

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 950
Pro Arg Arg Pro His Arg Ser Cys Asp Met Pro Ala Ser Gly Glu Pro
 1           5                  10                  15


Leu Gly Cys Thr Pro Leu Leu Pro Asn Asp Ser Gly His Pro Ser Glu
            20              25                  30


Leu Gly Gly Thr Arg Arg Ala Gly Asn Gly Ala Leu Gly Gly Pro Lys
        35              40              45


Ala His Arg Lys Leu Gln Thr His Pro Ser Leu Ala Ser Gln Gly Ser
    ·50              55                  60


Lys Lys Ser Lys Ser Ser Ser Lys Ser Thr Thr Ser Gln Ile Pro Leu
65              70              75                  80


Gln Ala Gln Glu Asp Cys Cys Val His Cys Ile Leu Ser Cys Leu Phe
            85                  90                  95


Cys Glu Phe Leu Thr Leu Cys Asn Ile Val Leu Asp Cys Ala Thr Cys
            100             105             110


Gly Ser Cys Ser Ser Glu Asp Ser Cys Leu Cys Cys Cys Cys Cys Gly
        115             120             125


Ser Gly Glu Cys Ala Asp Cys Asp Leu Pro Cys Asp Leu Asp Cys Gly
    130             135             140


Ile Leu Asp Ala Cys Cys Glu Ser Ala Asp Cys Leu Glu Ile Cys Met
145             150             155             160


Xaa Cys Cys Gly Leu Cys Phe Ser Ser
            165
```

```
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (234)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 951
Met Ser Asp Glu Thr Gly Arg Val Pro Glu Arg Asp Thr Lys Arg Met
 1               5                  10                  15

Gln Val Cys Leu Leu Ser Ala Met Pro Leu Pro Val Ala Leu Gln Thr
             20                  25                  30

Arg Leu Ala Lys Arg Gly Ile Leu Lys His Leu Glu Pro Glu Pro Glu
         35                  40                  45

Glu Glu Ile Ile Ala Glu Asp Tyr Asp Asp Asp Pro Val Asp Tyr Glu
         50                  55                  60

Ala Thr Arg Leu Glu Gly Leu Pro Pro Ser Trp Tyr Lys Val Phe Asp
65                  70                  75                  80

Pro Ser Cys Gly Leu Pro Tyr Tyr Trp Asn Ala Asp Thr Asp Leu Val
             85                  90                  95

Ser Trp Leu Ser Pro His Asp Pro Asn Ser Val Val Thr Lys Ser Ala
             100                 105                 110

Lys Lys Leu Arg Ser Ser Asn Ala Asp Ala Glu Glu Lys Leu Asp Arg
         115                 120                 125

Ser His Asp Lys Ser Asp Arg Gly His Asp Lys Ser Asp Arg Ser His
     130                 135                 140

Glu Lys Leu Asp Arg Gly His Asp Lys Ser Asp Arg Gly His Asp Lys
145                 150                 155                 160

Xaa Asp Arg Asp Arg Glu Arg Gly Tyr Asp Lys Val Asp Arg Glu Arg
             165                 170                 175

Glu Arg Asp Arg Glu Arg Asp Arg Asp Arg Gly Tyr Asp Lys Ala Asp
             180                 185                 190

Arg Glu Glu Gly Lys Glu Arg Arg His His Arg Arg Glu Glu Leu Ala
         195                 200                 205

Pro Tyr Pro Lys Ser Lys Lys Ala Val Ser Arg Lys Asp Glu Glu Leu
     210                 215                 220
```

```
Asp Pro Met Asp Pro Ser Ser Tyr Ser Xaa Arg Pro Arg Gly Thr Trp
225             230             235             240

Ser Thr Gly Leu Pro Lys Arg Asn Glu Ala Lys Thr Gly Ala Asp Thr
            245             250             255

Thr Ala Ala Gly Pro Leu Phe Gln Gln Arg Pro Tyr Pro Ser Pro Gly
            260             265             270

Ala Val Leu Arg Ala Asn Ala Glu Ala Ser Arg Thr Lys Gln Gln Asp
            275             280             285
```

```
<210> 952
<211> 323
<212> PRT
<213> Homo sapiens

<400> 952
Val Gly Gly Val Leu Pro Gly Trp Lys Leu Arg Pro Arg Ser Asp Gly
 1               5               10              15

Gly Leu Ser Glu Asp Gly Pro Gly Arg Asp His Gly Gly Gly Ser Arg
            20              25              30

Gly Gly Arg Gly Gly Ala Ala Gly Gly Arg Gly Gly Cys Gly Pro Gln
        35              40              45

Gly Ala Val Gly Gly Gly Met Ala Arg Ala Ser Ser Gly Asn Gly Ser
        50              55              60

Glu Glu Ala Trp Gly Ala Leu Arg Ala Pro Gln Gln Gln Leu Arg Glu
65              70              75              80

Leu Cys Pro Gly Val Asn Asn Gln Pro Tyr Leu Cys Glu Ser Gly His
            85              90              95

Cys Cys Gly Glu Thr Gly Cys Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp
            100             105             110

Phe Trp Leu Leu Trp Thr Val Leu Ile Leu Phe Ser Cys Cys Cys Ala
        115             120             125

Phe Arg His Arg Arg Ala Lys Leu Arg Leu Gln Gln Gln Gln Arg Gln
        130             135             140

Arg Glu Ile Asn Leu Leu Ala Tyr His Gly Ala Cys His Gly Ala Gly
```

911

```
      145                   150                  155                   160

   Pro Phe Pro Thr Gly Ser Leu Leu Asp Leu Arg Phe Leu Ser Thr Phe
                   165                  170                  175

   Lys Pro Pro Ala Tyr Glu Asp Val Val His Arg Pro Gly Thr Pro Pro
                   180                  185                  190

   Pro Pro Tyr Thr Val Ala Pro Gly Arg Pro Leu Thr Ala Ser Ser Glu
               195                  200                  205

   Gln Thr Cys Cys Ser Ser Ser Ser Ser Cys Pro Ala His Phe Glu Gly
       210                  215                  220

   Thr Asn Val Glu Gly Val Ser Ser His Gln Ser Ala Pro Pro His Gln
   225                  230                  235                  240

   Glu Gly Glu Pro Gly Ala Gly Val Thr Pro Ala Ser Thr Pro Pro Ser
                   245                  250                  255

   Cys Arg Tyr Arg Arg Leu Thr Gly Asp Ser Gly Ile Glu Leu Cys Pro
                   260                  265                  270

   Cys Pro Ala Ser Gly Glu Gly Glu Pro Val Lys Glu Val Arg Val Ser
               275                  280                  285

   Ala Thr Leu Pro Asp Leu Glu Asp Tyr Ser Pro Cys Ala Leu Pro Pro
       290                  295                  300

   Glu Ser Val Pro Gln Ile Phe Pro Met Gly Leu Ser Ser Ser Glu Gly
   305                  310                  315                  320

   Asp Ile Pro
```

```
<210> 953
<211> 433
<212> PRT
<213> Homo sapiens

<400> 953
Ala Lys Met Ser Val Asn Val Asn Arg Ser Val Ser Asp Gln Phe Tyr
  1               5                  10                  15

Arg Tyr Lys Met Pro Arg Leu Ile Ala Lys Val Glu Gly Lys Gly Asn
            20                  25                  30

Gly Ile Lys Thr Val Ile Val Asn Met Val Asp Val Ala Lys Ala Leu
            35                  40                  45
```

Asn Arg Pro Pro Thr Tyr Pro Thr Lys Tyr Phe Gly Cys Glu Leu Gly
    50   55   60

Ala Gln Thr Gln Phe Asp Val Lys Asn Asp Arg Tyr Ile Val Asn Gly
65   70   75   80

Ser His Glu Ala Asn Lys Leu Gln Asp Met Leu Asp Gly Phe Ile Lys
                85   90   95

Lys Phe Val Leu Cys Pro Glu Cys Glu Asn Pro Glu Thr Asp Leu His
            100   105   110

Val Asn Pro Lys Lys Gln Thr Ile Gly Asn Ser Cys Lys Ala Cys Gly
        115   120   125

Tyr Arg Gly Met Leu Asp Thr His His Lys Leu Cys Thr Phe Ile Leu
    130   135   140

Lys Asn Pro Pro Glu Asn Ser Asp Ser Gly Thr Gly Lys Lys Glu Lys
145   150   155   160

Glu Lys Lys Asn Arg Lys Gly Lys Asp Lys Glu Asn Gly Ser Val Ser
            165   170   175

Ser Ser Glu Thr Pro Pro Pro Pro Pro Pro Asn Glu Ile Asn Pro
            180   185   190

Pro Pro His Thr Met Glu Glu Glu Glu Asp Asp Asp Trp Gly Glu Asp
        195   200   205

Thr Thr Glu Glu Ala Gln Arg Arg Arg Met Asp Glu Ile Ser Asp His
    210   215   220

Ala Lys Val Leu Thr Leu Ser Asp Asp Leu Glu Arg Thr Ile Glu Glu
225   230   235   240

Arg Val Asn Ile Leu Phe Asp Phe Val Lys Lys Lys Lys Glu Glu Gly
            245   250   255

Val Ile Asp Ser Ser Asp Lys Glu Ile Val Ala Glu Ala Glu Arg Leu
        260   265   270

Asp Val Lys Ala Met Gly Pro Leu Val Leu Thr Glu Val Leu Phe Asn
        275   280   285

Glu Lys Ile Arg Glu Gln Ile Lys Lys Tyr Arg Arg His Phe Leu Arg
    290   295   300

Phe Cys His Asn Asn Lys Lys Ala Gln Arg Tyr Leu Leu His Gly Leu
305   310   315   320

```
Glu Cys Val Val Ala Met His Gln Ala Gln Leu Ile Ser Lys Ile Pro
            325             330             335

His Ile Leu Lys Glu Met Tyr Asp Ala Asp Leu Leu Glu Glu Glu Val
            340             345             350

Ile Ile Ser Trp Ser Glu Lys Ala Ser Lys Lys Tyr Val Ser Lys Glu
            355             360             365

Leu Ala Lys Glu Ile Arg Val Lys Ala Glu Pro Phe Ile Lys Trp Leu
    370             375             380

Lys Glu Ala Glu Glu Glu Ser Ser Gly Gly Glu Glu Glu Asp Glu Asp
385             390             395             400

Glu Asn Ile Glu Val Val Tyr Ser Lys Ala Ala Ser Val Pro Lys Val
            405             410             415

Glu Thr Val Lys Ser Asp Asn Lys Asp Asp Asp Ile Asp Ile Asp Ala
            420             425             430

Ile
```

```
<210> 954
<211> 428
<212> PRT
<213> Homo sapiens

<400> 954
Gly Tyr Gln Ile Gly Met Ala Leu Ala Ser Gly Pro Ala Arg Arg Ala
  1             5             10              15

Leu Ala Gly Ser Gly Gln Leu Gly Leu Gly Gly Phe Gly Ala Pro Arg
            20              25              30

Arg Gly Ala Tyr Glu Trp Gly Val Arg Ser Thr Arg Lys Ser Glu Pro
            35              40              45

Pro Pro Leu Asp Arg Val Tyr Glu Ile Pro Gly Leu Glu Pro Ile Thr
    50              55              60

Phe Ala Gly Lys Met His Phe Val Pro Trp Leu Ala Arg Pro Ile Phe
65              70              75              80

Pro Pro Trp Asp Arg Gly Tyr Lys Asp Pro Arg Phe Tyr Arg Ser Pro
            85              90              95
```

Pro Leu His Glu His Pro Leu Tyr Lys Asp Gln Ala Cys Tyr Ile Phe
          100   105   110

His His Arg Cys Arg Leu Leu Glu Gly Val Lys Gln Ala Leu Trp Leu
          115   120   125

Thr Lys Thr Lys Leu Ile Glu Gly Leu Pro Glu Lys Val Leu Ser Leu
          130   135   140

Val Asp Asp Pro Arg Asn His Ile Glu Asn Gln Asp Glu Cys Val Leu
145   150   155   160

Asn Val Ile Ser His Ala Arg Leu Trp Gln Thr Thr Glu Glu Ile Pro
               165   170   175

Lys Arg Glu Thr Tyr Cys Pro Val Ile Val Asp Asn Leu Ile Gln Leu
          180   185   190

Cys Lys Ser Gln Ile Leu Lys His Pro Ser Leu Ala Arg Arg Ile Cys
          195   200   205

Val Gln Asn Ser Thr Phe Ser Ala Thr Trp Asn Arg Glu Ser Leu Leu
     210   215   220

Leu Gln Val Arg Gly Ser Gly Gly Ala Arg Leu Ser Thr Lys Asp Pro
225   230   235   240

Leu Pro Thr Ile Ala Ser Arg Glu Glu Ile Glu Ala Thr Lys Asn His
               245   250   255

Val Leu Glu Thr Phe Tyr Pro Ile Ser Pro Ile Ile Asp Leu His Glu
          260   265   270

Cys Asn Ile Tyr Asp Val Lys Asn Asp Thr Gly Phe Gln Glu Gly Tyr
          275   280   285

Pro Tyr Pro Tyr Pro His Thr Leu Tyr Leu Leu Asp Lys Ala Asn Leu
     290   295   300

Arg Pro His Arg Leu Gln Pro Asp Gln Leu Arg Ala Lys Met Ile Leu
305   310   315   320

Phe Ala Phe Gly Ser Ala Leu Ala Gln Ala Arg Leu Leu Tyr Gly Asn
               325   330   335

Asp Ala Lys Val Leu Glu Gln Pro Val Val Val Gln Ser Val Gly Thr
          340   345   350

Asp Gly Arg Val Phe His Phe Leu Val Phe Gln Leu Asn Thr Thr Asp
          355   360   365

```
Leu Asp Ser Asn Glu Gly Val Lys Asn Leu Ala Trp Val Asp Ser Asp
    370             375             380
```

```
Gln Leu Leu Tyr Gln His Phe Trp Cys Leu Pro Val Ile Lys Lys Arg
385             390             395             400
```

```
Val Val Val Glu Pro Val Gly Pro Val Gly Phe Lys Pro Glu Thr Phe
                405             410             415
```

```
Arg Lys Phe Leu Ala Leu Tyr Leu His Gly Ala Ala
            420             425
```

<210> 955
<211> 169
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 955
```
Asp Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Glu Pro Gly
    1           5               10              15
```

```
Asp Arg Met Leu Val Leu Val Leu Gly Asp Leu His Ile Pro His Arg
            20              25              30
```

```
Cys Asn Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro Gly Lys
            35              40              45
```

```
Ile Gln His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu Ser Tyr
    50              55              60
```

```
Asp Tyr Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg Gly Asp
65              70              75              80
```

```
Phe Asp Glu Asn Leu Asn Tyr Pro Glu Gln Lys Val Val Thr Val Gly
```

```
                        85                   90                   95

   Gln Phe Lys Ile Gly Leu Ile His Gly His Gln Val Ile Pro Trp Gly
               100                 105                 110

   Asp Met Ala Ser Leu Ala Leu Leu Gln Arg Gln Phe Asp Val Asp Ile
               115                 120                 125

   Leu Ile Xaa Gly His Thr His Lys Phe Glu Ala Xaa Glu His Glu Asn
           130                 135                 140

   Lys Phe Tyr Ile Asn Pro Gly Ser Ala Thr Gly Ala Tyr Asn Ala Leu
   145                 150                 155                 160

   Glu Thr Asn Ile Ile Xaa Ser Leu Cys
                   165
```

```
<210> 956
<211> 39
<212> PRT
<213> Homo sapiens

<400> 956
Ser Pro Tyr Cys Gly Leu Gln Val Met Leu Phe Leu Leu His His Thr
1               5                   10                  15

Leu Trp Cys Leu Leu Pro Cys Ala Ser Ser Leu Arg Leu Ile Lys Lys
            20                  25                  30

Val Ser Arg Leu Leu Gln Leu
        35
```

```
<210> 957
<211> 219
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 957
Gln Gly His Cys Gly Cys Xaa Leu Xaa Ser Leu Leu Ala Asn Gly His
  1   5   10   15

Asp Leu Ala Ala Ala Met Ala Val Asp Lys Ser Asn Pro Thr Ser Lys
             20   25   30

His Lys Ser Gly Ala Val Ala Ser Leu Leu Ser Lys Ala Glu Arg Ala
         35   40   45

Thr Glu Leu Ala Ala Glu Gly Gln Leu Thr Leu Gln Gln Phe Ala Gln
     50   55   60

Ser Thr Glu Met Leu Lys Arg Val Val Gln Glu His Leu Pro Leu Met
 65   70   75   80

Ser Glu Ala Gly Ala Gly Leu Pro Asp Met Glu Ala Val Ala Gly Ala
                 85   90   95

Glu Ala Leu Asn Gly Gln Ser Asp Phe Pro Tyr Leu Gly Ala Phe Pro
             100   105   110

Ile Asn Pro Gly Leu Phe Ile Met Thr Pro Ala Gly Val Phe Leu Ala
         115   120   125

Glu Ser Ala Leu His Met Ala Gly Leu Ala Glu Tyr Pro Met Gln Gly
     130   135   140

Glu Leu Ala Ser Ala Ile Ser Ser Gly Lys Lys Lys Arg Lys Arg Cys
145   150   155   160

Gly Met Cys Ala Pro Cys Arg Arg Arg Ile Asn Cys Glu Gln Cys Ser
             165   170   175

Ser Cys Arg Asn Arg Lys Thr Gly His Gln Ile Cys Lys Phe Arg Lys
             180   185   190

Cys Glu Glu Leu Lys Lys Lys Pro Ser Ala Ala Leu Glu Lys Val Met
         195   200   205

Leu Pro Thr Gly Ala Ala Phe Arg Trp Phe Gln
210   215

<210> 958
<211> 259
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 958
Leu Pro Gln Asn Ala Val Leu Glu Ala Asp Phe Ala Lys Arg Gly Tyr
 1               5                  10                  15

Lys Leu Pro Lys Xaa Arg Lys Thr Gly Thr Thr Ile Ala Gly Val Val
            20                  25                  30

Tyr Lys Asp Gly Ile Val Leu Gly Ala Asp Thr Arg Ala Thr Glu Gly
        35                  40                  45

Met Val Val Ala Asp Lys Asn Cys Ser Lys Ile His Phe Ile Ser Pro
    50                  55                  60

Asn Ile Tyr Cys Cys Gly Ala Gly Thr Xaa Ala Asp Thr Asp Met Thr
65              70                  75                      80

Thr Gln Leu Ile Ser Ser Asn Leu Glu Leu His Ser Leu Ser Thr Gly
                85                  90                  95

Arg Leu Pro Arg Val Val Thr Ala Asn Arg Met Leu Lys Gln Met Leu
            100                 105                 110

Phe Arg Tyr Gln Gly Tyr Ile Gly Ala Ala Leu Val Leu Gly Gly Val
        115                 120                 125

Asp Val Thr Gly Pro His Leu Tyr Ser Ile Tyr Pro His Gly Ser Thr
    130                 135                 140

Asp Lys Leu Pro Tyr Val Thr Met Gly Ser Gly Ser Leu Ala Ala Met
145                 150                 155                 160

Ala Val Phe Glu Asp Lys Phe Arg Pro Asp Met Glu Glu Glu Glu Ala
                165                 170                 175

Lys Asn Leu Val Ser Glu Ala Ile Ala Ala Gly Ile Phe Asn Asp Leu
                180                 185                 190

Gly Ser Gly Ser Asn Ile Asp Leu Cys Val Ile Ser Lys Asn Lys Leu
            195                 200                 205

Asp Phe Leu Arg Pro Tyr Thr Val Pro Asn Lys Lys Gly Thr Arg Leu
    210                 215                 220
```

```
Gly Arg Tyr Arg Cys Glu Lys Gly Thr Thr Ala Val Leu Thr Glu Lys
225             230             235             240

Ile Thr Pro Leu Glu Ile Glu Val Leu Glu Glu Thr Val Gln Thr Met
                245             250             255

Asp Thr Ser
```

```
<210> 959
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 959
Phe Trp Ser Ala Ala Lys Phe Asp Phe Thr Ser His Thr Pro Phe Leu
 1               5              10              15

Pro Leu Glu Met Gln Phe Arg Gln Arg Pro Cys Gly Glu Ser Cys Asn
            20              25              30

Ile Lys Phe Xaa Phe Arg Arg Ser Xaa Pro Gln Thr Ser Glu Pro Leu
        35              40              45

Ala Val Leu Pro Xaa Asn Lys Asn Glu Leu Glu Lys Lys Val Ala Gln
    50              55              60

Leu Gln Arg Ser Lys Ser Ser Tyr Phe Pro Thr
65              70              75
```

```
<210> 960
```

<211> 128
<212> PRT
<213> Homo sapiens

<400> 960
Gln Ser Arg Gly Leu Arg Leu Leu Gly Pro Gly Asp Gly Ala Gly Met
1   5   10   15

Thr Pro Gly Val Val His Ala Ser Pro Pro Gln Ser Gln Arg Val Pro
            20   25   30

Arg Gln Ala Pro Cys Glu Trp Ala Ile Arg Asn Ile Gly Gln Lys Pro
        35   40   45

Lys Glu Pro Asn Cys His Asn Cys Gly Thr His Ile Gly Leu Arg Ser
    50   55   60

Lys Thr Leu Arg Gly Thr Pro Asn Tyr Leu Pro Ile Arg Gln Asp Thr
65   70   75   80

His Pro Pro Ser Val Ile Phe Cys Leu Ala Gly Val Gly Val Pro Gly
            85   90   95

Gly Thr Cys Arg Pro Ala Pro Cys Val Pro Arg Phe Ala Ala Leu Pro
            100   105   110

Trp Ala Thr Asn His Pro Gly Pro Gly Cys Leu Ser Asp Leu Arg Ala
    115   120   125

<210> 961
<211> 564
<212> PRT
<213> Homo sapiens

<400> 961
Lys Met Lys Ser Val Lys Ile Ala Phe Ala Val Thr Leu Glu Thr Val
1   5   10   15

Leu Ala Gly His Glu Asn Trp Val Asn Ala Val His Trp Gln Pro Val
            20   25   30

Phe Tyr Lys Asp Gly Val Leu Gln Gln Pro Val Arg Leu Leu Ser Ala
        35   40   45

Ser Met Asp Lys Thr Met Ile Leu Trp Ala Pro Asp Glu Glu Ser Gly
    50   55   60

```
Val Trp Leu Glu Gln Val Arg Val Gly Glu Val Gly Gly Asn Thr Leu
65              70              75              80

Gly Phe Tyr Asp Cys Gln Phe Asn Glu Asp Gly Ser Met Ile Ile Ala
            85              90              95

His Ala Phe His Gly Ala Leu His Leu Trp Lys Gln Asn Thr Val Asn
            100             105             110

Pro Arg Glu Trp Thr Pro Glu Ile Val Ile Ser Gly His Phe Asp Gly
        115             120             125

Val Gln Asp Leu Val Trp Asp Pro Glu Gly Glu Phe Ile Ile Thr Val
    130             135             140

Gly Thr Asp Gln Thr Thr Arg Leu Phe Ala Pro Trp Lys Arg Lys Asp
145             150             155             160

Gln Ser Gln Val Thr Trp His Glu Ile Ala Arg Pro Gln Ile His Gly
            165             170             175

Tyr Asp Leu Lys Cys Leu Ala Met Ile Asn Arg Phe Gln Phe Val Ser
            180             185             190

Gly Ala Asp Glu Lys Val Leu Arg Val Phe Ser Ala Pro Arg Asn Phe
            195             200             205

Val Glu Asn Phe Cys Ala Ile Thr Gly Gln Ser Leu Asn His Val Leu
    210             215             220

Cys Asn Gln Asp Ser Asp Leu Pro Glu Gly Ala Thr Val Pro Ala Leu
225             230             235             240

Gly Leu Ser Asn Lys Ala Val Phe Gln Gly Asp Ile Ala Ser Gln Pro
            245             250             255

Ser Asp Glu Glu Glu Leu Leu Thr Ser Thr Gly Phe Glu Tyr Gln Gln
            260             265             270

Val Ala Phe Gln Pro Ser Ile Leu Thr Glu Pro Pro Thr Glu Asp His
    275             280             285

Leu Leu Gln Asn Thr Leu Trp Pro Glu Val Gln Lys Leu Tyr Gly His
    290             295             300

Gly Tyr Glu Ile Phe Cys Val Thr Cys Asn Ser Ser Lys Thr Leu Leu
305             310             315             320

Ala Ser Ala Cys Lys Ala Ala Lys Lys Glu His Ala Ala Ile Ile Leu
            325             330             335
```

Trp Asn Thr Thr Ser Trp Lys Gln Val Gln Asn Leu Val Phe His Ser
         340   345   350

Leu Thr Val Thr Gln Met Ala Phe Ser Pro Asn Glu Lys Phe Leu Leu
         355   360   365

Ala Val Ser Arg Asp Arg Thr Trp Ser Leu Trp Lys Lys Gln Asp Thr
370   375   380

Ile Ser Pro Glu Phe Glu Pro Val Phe Ser Leu Phe Ala Phe Thr Asn
385   390   395   400

Lys Ile Thr Ser Val His Ser Arg Ile Ile Trp Ser Cys Asp Trp Ser
             405   410   415

Pro Asp Ser Lys Tyr Phe Phe Thr Gly Ser Arg Asp Lys Lys Val Val
         420   425   430

Val Trp Gly Glu Cys Asp Ser Thr Asp Asp Cys Ile Glu His Asn Ile
         435   440   445

Gly Pro Cys Ser Ser Val Leu Asp Val Gly Gly Ala Val Thr Ala Val
         450   455   460

Ser Val Cys Pro Val Leu His Pro Ser Gln Arg Tyr Val Val Ala Val
465   470   475   480

Gly Leu Glu Cys Gly Lys Ile Cys Leu Tyr Thr Trp Lys Lys Thr Asp
             485   490   495

Gln Val Pro Glu Ile Asn Asp Trp Thr His Cys Val Glu Thr Ser Gln
         500   505   510

Ser Gln Ser His Thr Leu Ala Ile Arg Lys Leu Cys Trp Lys Asn Cys
         515   520   525

Ser Gly Lys Thr Glu Gln Lys Glu Ala Glu Gly Ala Glu Trp Leu His
         530   535   540

Phe Ala Ser Cys Gly Glu Asp His Thr Val Lys Ile His Arg Val Asn
545   550   555   560

Lys Cys Ala Leu

<210> 962
<211> 43
<212> PRT

<213> Homo sapiens

<400> 962
Phe Lys Tyr Val Lys Cys Gly Ser Phe Thr Pro His His Ser Glu His
1   5   10   15

Thr Gly Glu Met Cys Phe Phe Gly Lys Leu Lys Gly Ala Ser Ser Leu
            20   25   30

Ile Gln Arg Asn Ile Ser His Val Cys Ser Phe
        35   40

<210> 963
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 963
Glu Ser Arg Val Asp Pro Arg Val Arg Glu Arg Ser Ala Arg Thr Ala
1   5   10   15

Gly Ala Thr Val Gly Pro Ala Ala Val Met Ser Val Leu Arg Pro Leu
            20   25   30

Asp Lys Leu Pro Gly Leu Asn Thr Ala Thr Ile Leu Leu Val Gly Thr
        35   40   45

Glu Asp Ala Leu Leu Gln Gln Leu Ala Asp Ser Met Leu Lys Glu Asp
    50   55   60

Cys Ala Ser Glu Leu Lys Val His Leu Ala Lys Ser Leu Pro Leu Pro
65   70   75   80

Ser Ser Val Asn Arg Pro Arg Ile Asp Leu Ile Val Phe Val Val Asn
                85   90   95

Leu His Ser Lys Tyr Ser Leu Gln Asn Thr Glu Glu Ser Leu Arg His
            100   105   110

Val Asp Ala Ser Phe Phe Leu Gly Lys Val Cys Phe Leu Ala Thr Gly
        115   120   125

Gly Gly Xaa Leu
        130

924

```
<210> 964
<211> 175
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 964
His Glu Arg Ser Cys Cys Asp Ala Arg Ser Glu Ala Xaa Gln Gly Arg
 1           5                  10                  15

Gly Arg Val Gly Ala Gly Ala Gly Ala Ala Trp Ser Ser Cys Gly Val
            20              25                  30

Ser Gly Pro Gly Arg Gly Met Gly Val Leu Ala Ala Ala Ala Arg Cys
        35              40                  45

Leu Val Arg Gly Ala Asp Arg Met Ser Lys Trp Thr Ser Lys Arg Gly
    50              55                  60

Pro Arg Ser Phe Arg Gly Arg Xaa Gly Arg Gly Ala Lys Gly Ile Gly
65              70                  75                  80

Phe Leu Thr Ser Gly Trp Arg Phe Val Gln Ile Lys Glu Met Val Pro
                85                  90                  95

Glu Phe Val Val Pro Asp Leu Thr Gly Phe Lys Leu Lys Pro Tyr Val
            100                 105                 110

Ser Tyr Leu Ala Pro Glu Ser Glu Glu Thr Pro Leu Thr Ala Ala Gln
        115                 120                 125

Leu Phe Ser Glu Ala Val Ala Pro Ala Ile Glu Lys Asp Phe Lys Asp
    130                 135                 140

Gly Thr Phe Asp Pro Asp Asn Leu Glu Lys Tyr Gly Phe Glu Pro Thr
145                 150                 155                 160

Gln Glu Gly Lys Leu Phe Gln Leu Tyr Pro Arg Asn Phe Leu Arg
                165                 170                 175
```

925

```
<210> 965
<211> 363
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (356)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 965
Leu Leu Arg Arg Leu Arg Thr Ala Val Pro Gly Ser Leu Glu Ala Gln
 1           5               10              15

Lys Arg Lys Pro Ser Pro Gly Pro Gly Ser Leu Asp Leu Val Ser Leu
            20              25              30

Gly Ser Gly Asn Ser Gly Ser Gln Arg Thr Val Leu Ile Met Asp Lys
        35              40              45

Gln Asn Ser Gln Met Asn Ala Ser His Pro Glu Thr Asn Leu Pro Val
    50              55              60

Gly Tyr Pro Pro Gln Tyr Pro Pro Thr Ala Phe Gln Gly Pro Pro Gly
65              70              75              80

Tyr Ser Gly Tyr Pro Gly Pro Gln Val Ser Tyr Pro Pro Pro Pro Ala
            85              90              95

Gly His Ser Gly Pro Gly Pro Ala Gly Phe Pro Val Pro Asn Gln Pro
            100             105             110

Val Tyr Asn Gln Pro Val Tyr Asn Gln Pro Val Gly Ala Ala Gly Val
        115             120             125

Pro Trp Met Pro Ala Pro Gln Pro Pro Leu Asn Cys Pro Pro Gly Leu
    130             135             140

Glu Tyr Leu Ser Gln Ile Asp Gln Ile Leu Ile His Gln Gln Ile Glu
145             150             155             160

Leu Leu Glu Val Leu Thr Gly Phe Glu Thr Asn Asn Lys Tyr Glu Ile
            165             170             175

Lys Asn Ser Phe Gly Gln Arg Val Tyr Phe Ala Ala Glu Asp Thr Asp
            180             185             190

Cys Cys Thr Arg Asn Cys Cys Gly Pro Ser Arg Pro Phe Thr Leu Arg
```

```
             195              200              205

Ile Ile Asp Asn Met Gly Gln Glu Val Ile Thr Leu Glu Arg Pro Leu
    210              215              220

Arg Cys Ser Ser Cys Cys Cys Pro Cys Cys Leu Gln Glu Ile Glu Ile
225              230              235              240

Gln Ala Pro Pro Gly Val Pro Ile Gly Tyr Val Ile Gln Thr Trp His
              245              250              255

Pro Cys Leu Pro Lys Phe Thr Ile Gln Asn Glu Lys Arg Glu Asp Val
              260              265              270

Leu Lys Ile Ser Gly Pro Cys Val Val Cys Ser Cys Cys Gly Asp Val
          275              280              285

Asp Phe Glu Ile Lys Ser Leu Asp Glu Gln Cys Val Val Gly Lys Ile
    290              295              300

Ser Lys His Trp Thr Gly Ile Leu Arg Glu Ala Phe Thr Asp Ala Asp
305              310              315              320

Asn Phe Gly Ile Gln Phe Pro Leu Asp Leu Asp Val Lys Met Lys Ala
              325              330              335

Val Met Ile Gly Ala Cys Phe Leu Ile Asp Phe Met Phe Phe Glu Ser
          340              345              350

Thr Gly Ser Xaa Glu Gln Lys Ser Gly Val Trp
       355              360
```

<210> 966
<211> 131
<212> PRT
<213> Homo sapiens

<400> 966
```
Ala Glu Val His Thr Arg Lys Gln Gly Pro Glu Ala Glu Pro Ala Ala
 1               5               10              15

Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu
              20              25              30

Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro
          35              40              45

Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu
    50              55              60
```

```
Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala
 65              70              75                  80


Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn
                85              90                  95


Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala
            100             105             110


Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys
        115             120             125


Val Ile Leu
    130
```

<210> 967
<211> 344
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (306)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 967
```
Pro Thr Pro Ala Ser His Ser Pro Ser Pro Ser Leu Pro Ala Leu Pro
  1           5               10              15


Pro Ser Pro Pro His Arg Pro Asp Ser Pro Leu Phe Asn Ser Arg Cys
            20              25              30


Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Leu Glu Glu Leu Pro Arg
        35              40              45


Ala Glu Gly Ala Ala Val Ala Gly Gly Pro Gly Ser Ser Ala Gly Pro
    50              55              60


Pro Pro Pro Xaa Ala Glu Ala Ala Glu Pro Glu Ala Arg Leu Ala Glu
 65              70              75                  80


Val Thr Glu Ser Ser Asn Gln Asp Ala Leu Ser Gly Ser Ser Asp Leu
                85              90                  95
```

```
Leu Glu Leu Leu Leu Gln Glu Asp Ser Arg Ser Gly Thr Gly Ser Ala
        100                 105                 110

Ala Ser Gly Ser Leu Gly Ser Gly Leu Gly Ser Gly Ser Gly Ser Gly
        115                 120                 125

Ser His Glu Gly Gly Ser Thr Ser Ala Ser Ile Thr Arg Ser Ser Gln
    130                 135                 140

Ser Ser His Thr Ser Lys Tyr Phe Gly Ser Ile Asp Ser Ser Glu Ala
145                 150                 155                 160

Glu Ala Gly Ala Ala Arg Gly Gly Ala Glu Pro Gly Asp Gln Val Ile
                165                 170                 175

Lys Tyr Val Leu Gln Asp Pro Ile Trp Leu Leu Met Ala Asn Ala Asp
        180                 185                 190

Gln Arg Val Met Met Thr Tyr Gln Val Pro Ser Arg Asp Met Thr Ser
        195                 200                 205

Val Leu Lys Gln Asp Arg Glu Arg Leu Arg Ala Met Gln Lys Gln Gln
    210                 215                 220

Pro Arg Phe Ser Glu Asp Gln Arg Arg Glu Leu Gly Ala Val His Ser
225                 230                 235                 240

Trp Val Arg Lys Gly Gln Leu Pro Arg Ala Leu Asp Val Met Ala Cys
                245                 250                 255

Val Asp Cys Gly Ser Ser Thr Gln Asp Pro Gly His Pro Asp Asp Pro
                260                 265                 270

Leu Phe Ser Glu Leu Asp Gly Leu Gly Leu Glu Pro Met Glu Glu Gly
        275                 280                 285

Gly Gly Glu Gln Gly Ser Ser Gly Gly Gly Ser Gly Glu Gly Glu Gly
        290                 295                 300

Cys Xaa Glu Ala Gln Gly Gly Ala Lys Ala Ser Ser Ser Gln Asp Leu
305                 310                 315                 320

Ala Met Glu Glu Glu Glu Glu Gly Arg Ser Ser Ser Ser Pro Ala Leu
                325                 330                 335

Pro Thr Ala Gly Asn Cys Thr Ser
                340
```

```
<210> 968
<211> 67
<212> PRT
<213> Homo sapiens

<400> 968
Arg Cys Ser Ser Phe Phe Leu Ser Leu Leu Val Lys Ile Thr Asn Ile
 1               5                  10                  15

Trp Glu Gly Phe Lys Asp Ala Cys Tyr Gly Ala Asn Val Leu Ser Leu
                20                  25                  30

Leu Asn Ser Arg Ser Glu Leu Leu Thr Cys Ile Gln Asn Ile Asn Ala
             35                  40                  45

Gln Asn Leu Tyr Met Ser Pro Ile Arg Lys Ile His Trp His Ala Thr
         50                  55                  60

Gly Asp Ser
 65
```

```
<210> 969
<211> 325
<212> PRT
<213> Homo sapiens

<400> 969
Leu Asn Leu Arg Ser Pro His Ile Cys Phe Arg Ser Ser Lys Pro Ser
 1               5                  10                  15

Trp Ala Asp Gln Val Glu Glu Glu Gly Glu Asp Asp Lys Cys Val Thr
                20                  25                  30

Ser Glu Leu Leu Lys Gly Ile Pro Leu Ala Thr Gly Asp Thr Ser Pro
             35                  40                  45

Glu Pro Glu Leu Leu Pro Gly Ala Pro Leu Pro Pro Pro Lys Glu Val
         50                  55                  60

Ile Asn Gly Asn Ile Lys Thr Val Thr Glu Tyr Lys Ile Asp Glu Asp
 65                  70                  75                  80

Gly Lys Lys Phe Lys Ile Val Arg Thr Phe Arg Ile Glu Thr Arg Lys
                 85                  90                  95

Ala Ser Lys Ala Val Ala Arg Arg Lys Asn Trp Lys Lys Phe Gly Asn
                100                 105                 110

Ser Glu Phe Asp Pro Pro Gly Pro Asn Val Ala Thr Thr Thr Val Ser
```

930

              115   120   125

    Asp Asp Val Ser Met Thr Phe Ile Thr Ser Lys Glu Asp Leu Asn Cys
        130   135   140

    Gln Glu Glu Glu Asp Pro Met Asn Lys Leu Lys Gly Gln Lys Ile Val
    145   150   155   160

    Ser Cys Arg Ile Cys Lys Gly Asp His Trp Thr Thr Arg Cys Pro Tyr
                    165   170   175

    Lys Asp Thr Leu Gly Pro Met Gln Lys Glu Leu Ala Glu Gln Leu Gly
                    180   185   190

    Leu Ser Thr Gly Glu Lys Glu Lys Leu Pro Gly Glu Leu Glu Pro Val
                    195   200   205

    Gln Ala Thr Gln Asn Lys Thr Gly Lys Tyr Val Pro Pro Ser Leu Arg
        210   215   220

    Asp Gly Ala Ser Arg Arg Gly Glu Ser Met Gln Pro Asn Arg Arg Ala
    225   230   235   240

    Asp Asp Asn Ala Thr Ile Arg Val Thr Asn Leu Ser Glu Asp Thr Arg
                    245   250   255

    Glu Thr Asp Leu Gln Glu Leu Phe Arg Pro Phe Gly Ser Ile Ser Arg
                    260   265   270

    Ile Tyr Leu Ala Lys Asp Lys Thr Thr Gly Gln Ser Lys Gly Phe Ala
                    275   280   285

    Phe Ile Ser Phe His Arg Arg Glu Asp Ala Ala Arg Ala Ile Ala Gly
        290   295   300

    Val Ser Gly Phe Gly Tyr Asp His Leu Ile Leu Asn Val Glu Trp Ala
    305   310   315   320

    Lys Pro Ser Thr Asn
                    325

<210> 970
<211> 357
<212> PRT
<213> Homo sapiens

<400> 970
Val Arg Val Lys Met Ala Ala Ala Glu Ala Ala Asn Cys Ile Met Glu
    1   5   10   15

```
Val Ser Cys Gly Gln Ala Glu Ser Ser Glu Lys Pro Asn Ala Glu Asp
         20                  25                  30

Met Thr Ser Lys Asp Tyr Tyr Phe Asp Ser Tyr Ala His Phe Gly Ile
         35                  40                  45

His Glu Glu Met Leu Lys Asp Glu Val Arg Thr Leu Thr Tyr Arg Asn
     50                  55                  60

Ser Met Phe His Asn Arg His Leu Phe Lys Asp Lys Val Val Leu Asp
 65                  70                  75                  80

Val Gly Ser Gly Thr Gly Ile Leu Cys Met Phe Ala Ala Lys Ala Gly
                 85                  90                  95

Ala Arg Lys Val Ile Gly Ile Glu Cys Ser Ser Ile Ser Asp Tyr Ala
             100                 105                 110

Val Lys Ile Val Lys Ala Asn Lys Leu Asp His Val Val Thr Ile Ile
             115                 120                 125

Lys Gly Lys Val Glu Glu Val Glu Leu Pro Val Glu Lys Val Asp Ile
     130                 135                 140

Ile Ile Ser Glu Trp Met Gly Tyr Cys Leu Phe Tyr Glu Ser Met Leu
145                 150                 155                 160

Asn Thr Val Leu Tyr Ala Arg Asp Lys Trp Leu Ala Pro Asp Gly Leu
             165                 170                 175

Ile Phe Pro Asp Arg Ala Thr Leu Tyr Val Thr Ala Ile Glu Asp Arg
             180                 185                 190

Gln Tyr Lys Asp Tyr Lys Ile His Trp Trp Glu Asn Val Tyr Gly Phe
     195                 200                 205

Asp Met Ser Cys Ile Lys Asp Val Ala Ile Lys Glu Pro Leu Val Asp
     210                 215                 220

Val Val Asp Pro Lys Gln Leu Val Thr Asn Ala Cys Leu Ile Lys Glu
225                 230                 235                 240

Val Asp Ile Tyr Thr Val Lys Val Glu Asp Leu Thr Phe Thr Ser Pro
             245                 250                 255

Phe Cys Leu Gln Val Lys Arg Asn Asp Tyr Val His Ala Leu Val Ala
             260                 265                 270

Tyr Phe Asn Ile Glu Phe Thr Arg Cys His Lys Arg Thr Gly Phe Ser
     275                 280                 285
```

```
Thr Ser Pro Glu Ser Pro Tyr Thr His Trp Lys Gln Thr Val Phe Tyr
    290             295             300

Met Glu Asp Tyr Leu Thr Val Lys Thr Gly Glu Glu Ile Phe Gly Thr
305             310             315                     320

Ile Gly Met Arg Pro Asn Ala Lys Asn Asn Arg Asp Leu Asp Phe Thr
            325             330             335

Ile Asp Leu Asp Phe Lys Gly Gln Leu Cys Glu Leu Ser Cys Ser Thr
            340             345             350

Asp Tyr Arg Met Arg
        355


<210> 971
<211> 176
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (176)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 971
Gly Val Pro Arg Arg Ala Tyr Gln Ala Xaa Xaa Leu Arg Arg Val Asp
  1             5               10                  15

Asp Phe Lys Lys Ala Phe Ser Lys Glu Lys Met Glu Lys Thr Lys Val
            20              25              30

Arg Thr Arg Glu Asn Leu Glu Lys Thr Arg Leu Lys Thr Lys Glu Asn
        35              40              45

Leu Glu Lys Thr Arg His Thr Leu Glu Lys Arg Met Asn Lys Leu Gly
    50              55              60
```

```
Thr Arg Leu Val Pro Ala Glu Arg Arg Glu Lys Leu Lys Thr Ser Arg
 65              70              75              80

Asp Lys Leu Arg Lys Ser Phe Thr Pro Asp His Val Val Tyr Ala Arg
             85              90              95

Ser Lys Thr Ala Val Tyr Lys Val Pro Pro Phe Thr Phe His Val Lys
            100             105             110

Lys Ile Arg Glu Gly Gln Val Glu Val Leu Lys Ala Thr Glu Met Val
            115             120             125

Glu Val Gly Ala Asp Asp Asp Glu Gly Gly Ala Glu Arg Gly Glu Ala
        130             135             140

Gly Asp Leu Arg Arg Gly Ser Ser Pro Asp Val His Ala Leu Leu Glu
145             150             155             160

Ile Thr Glu Glu Ser Asp Ala Val Leu Val Asp Lys Ser Asp Ser Xaa
                165             170             175
```

```
<210> 972
<211> 159
<212> PRT
<213> Homo sapiens

<400> 972
Gly Lys Ala Arg Arg Arg Ala Ala Lys Leu Gln Ser Ser Gln Glu Pro
 1               5              10              15

Glu Ala Pro Pro Pro Arg Asp Val Ala Leu Leu Gln Gly Arg Ala Asn
             20              25              30

Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile
             35              40              45

Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val
     50              55              60

Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe
 65              70              75              80

Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu
             85              90              95

Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys
```

```
                    100                 105                 110

Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe
        115             120                 125

Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg
    130                 135                 140

Lys Leu Gly Leu Arg Leu Gly Tyr Ile Ile His Ser Leu Gly Thr
145                 150                 155
```

<210> 973
<211> 233
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 973
```
Arg Ala Xaa Lys Ala Ala Pro Arg Arg Ala Leu Ala Arg Leu Val Leu
 1               5                   10                  15

Ala Trp Cys Arg Trp Leu Val Ser Ala Thr Cys Val Gly Thr Ala Asp
            20                  25                  30

Arg Lys Met Ser Ser Gly Asn Ala Lys Ile Gly His Pro Ala Pro Asn
        35                  40                  45

Phe Lys Ala Thr Ala Val Met Pro Asp Gly Gln Phe Lys Asp Ile Ser
    50                  55                  60

Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu
65                  70                  75                  80

Asp Phe Thr Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg
            85                  90                  95

Ala Glu Glu Phe Lys Lys Leu Asn Cys Gln Val Ile Gly Ala Ser Val
            100                 105                 110

Asp Ser His Phe Cys His Leu Ala Trp Val Asn Thr Pro Lys Lys Gln
        115                 120                 125

Gly Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg
    130                 135                 140
```

```
Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser
145                 150             155             160

Phe Arg Gly Leu Phe Ile Ile Asp Asp Lys Gly Ile Leu Arg Gln Ile
                165             170             175

Thr Val Asn Asp Leu Pro Val Gly Arg Ser Val Asp Glu Thr Leu Arg
            180             185             190

Leu Val Gln Ala Phe Gln Phe Thr Asp Lys His Gly Glu Val Cys Pro
        195             200             205

Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile Lys Pro Asp Val Gln Lys
        210             215             220

Ser Lys Glu Tyr Phe Ser Lys Gln Lys
225             230
```

```
<210> 974
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 974
Ser Trp Asp Arg Arg Leu Met Gln Asp Asp Asn Arg Gly Leu Gly Gln
  1             5               10              15

Gly Leu Lys Asp Asn Lys Arg Thr Cys Asn Arg Phe Arg Leu Leu Leu
            20              25              30

Glu Arg Arg Thr Xaa Gly Ser Glu Val Gln Asp Ser His Ser Thr Ser
            35              40              45

Tyr Pro Ser Leu Leu Ser His Leu Thr Ser Met Tyr Leu Asn Ala Pro
        50              55              60

Ala Leu Ala Leu Pro Val Ala Arg Met Gln Leu Pro Gly Pro Gly Leu
65              70              75              80

Arg Ser Phe His Pro Leu Ala Ser Ser Leu Pro Cys Asp Phe His Leu
            85              90              95

Leu Asn Leu Arg Thr Leu Gln Ala Glu Glu Asp Thr Leu Pro Ser Ala
            100             105             110
```

```
Glu Thr Ala Leu Ile Leu His Arg Lys Val Leu Thr Ala Ala Trp Arg
        115             120             125

Gln Glu Leu Gly Leu Gln Leu His His Lys Pro Arg Gln Gly Ser Pro
        130             135             140

Gly Gln Pro Phe Pro Trp Pro Gly Cys Gly Ile Pro Ser Ala Asn Leu
145             150             155             160

Leu Asp Val Thr Val Pro Ser Gly Leu Pro Val Gln Gln His
            165             170
```

```
<210> 975
<211> 380
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 975
Arg Pro Glu Val Arg His Ser Arg Glu Ala Pro Glu Ser Arg Arg Trp
 1               5               10              15

Ala Val Trp Arg Ser Leu Glu Ser Leu Pro Arg His Gln Leu Leu Cys
            20              25              30

Leu Pro Val Gly Ala Pro Pro Ala Pro Ala Met Leu Ser Ala Leu Ala
        35              40              45

Arg Pro Ala Ser Ala Ala Leu Arg Arg Ser Phe Ser Thr Ser Ala Gln
    50              55              60

Asn Asn Ala Lys Val Ala Val Leu Gly Ala Ser Gly Gly Ile Gly Gln
65              70              75              80

Pro Leu Ser Leu Leu Leu Lys Asn Ser Pro Leu Val Ser Arg Leu Thr
            85              90              95

Leu Tyr Asp Ile Ala His Thr Pro Gly Val Ala Ala Asp Leu Ser His
            100             105             110

Ile Glu Thr Lys Ala Ala Val Lys Gly Tyr Leu Gly Pro Glu Gln Leu
        115             120             125

Pro Asp Cys Leu Lys Xaa Cys Asp Val Val Val Ile Pro Ala Gly Val
```

```
            130                   135                   140

Pro Arg Lys Pro Gly Met Thr Arg Asp Asp Leu Phe Asn Thr Asn Ala
145                 150                 155                 160

Thr Ile Val Ala Thr Leu Thr Ala Ala Cys Ala Gln His Cys Pro Glu
                165                 170                 175

Ala Met Ile Cys Val Ile Ala Asn Pro Val Asn Ser Thr Ile Pro Ile
                180                 185                 190

Thr Ala Glu Val Phe Lys Lys His Gly Val Tyr Asn Pro Asn Lys Ile
            195                 200                 205

Phe Gly Val Thr Thr Leu Asp Ile Val Arg Ala Asn Thr Phe Val Ala
    210                 215                 220

Glu Leu Lys Gly Leu Asp Pro Ala Arg Val Asn Val Pro Val Ile Gly
225                 230                 235                 240

Gly His Ala Gly Lys Thr Ile Ile Pro Leu Ile Ser Gln Cys Thr Pro
                245                 250                 255

Lys Val Asp Phe Pro Gln Asp Gln Leu Thr Ala Leu Thr Gly Arg Ile
                260                 265                 270

Gln Glu Ala Gly Thr Glu Val Val Lys Ala Lys Ala Gly Ala Gly Ser
            275                 280                 285

Ala Thr Leu Ser Met Ala Tyr Ala Gly Ala Arg Phe Val Phe Ser Leu
    290                 295                 300

Val Asp Ala Met Asn Gly Lys Glu Gly Val Val Glu Cys Ser Phe Val
305                 310                 315                 320

Lys Ser Gln Glu Thr Glu Cys Thr Tyr Phe Ser Thr Pro Leu Leu Leu
                325                 330                 335

Gly Lys Lys Gly Ile Glu Lys Asn Leu Gly Ile Gly Lys Val Ser Ser
            340                 345                 350

Phe Glu Glu Lys Met Ile Ser Asp Ala Ile Pro Glu Leu Lys Ala Ser
            355                 360                 365

Ile Lys Lys Gly Glu Asp Phe Val Lys Thr Leu Lys
    370                 375                 380
```

<210> 976
<211> 269

<212> PRT
<213> Homo sapiens

<400> 976
Ala Ala Leu Ser Gln Ile Thr Ile Ala Thr Pro Pro Ala Val Lys Gln
 1   5   10   15

Thr Ile Ser Asn Ile Ser Gly Phe Asn Glu Thr Cys Leu Arg Trp Arg
                 20   25   30

Ser Ile Lys Thr Ala Asp Met Glu Glu Met Tyr Leu Phe His Ile Trp
             35   40   45

Gly Gln Arg Trp Tyr Gln Lys Glu Phe Ala Gln Glu Met Thr Phe Asn
         50   55   60

Ile Ser Ser Ser Ser Arg Asp Pro Glu Val Cys Leu Asp Leu Arg Pro
65   70   75   80

Gly Thr Asn Tyr Asn Val Ser Leu Arg Ala Leu Ser Ser Glu Leu Pro
                 85   90   95

Val Val Ile Ser Leu Thr Thr Gln Ile Thr Glu Pro Pro Leu Pro Glu
             100   105   110

Val Glu Phe Phe Thr Val His Arg Gly Pro Leu Pro Arg Leu Arg Leu
         115   120   125

Arg Lys Ala Lys Glu Lys Asn Gly Pro Ile Ser Ser Tyr Gln Val Leu
         130   135   140

Val Leu Pro Leu Ala Leu Gln Ser Thr Phe Ser Cys Asp Ser Glu Gly
145   150   155   160

Ala Ser Ser Phe Phe Ser Asn Ala Ser Asp Ala Asp Gly Tyr Val Ala
                 165   170   175

Ala Glu Leu Leu Ala Lys Asp Val Pro Asp Asp Ala Met Glu Ile Pro
             180   185   190

Ile Gly Asp Arg Leu Tyr Tyr Gly Glu Tyr Tyr Asn Ala Pro Leu Lys
         195   200   205

Arg Gly Ser Asp Tyr Cys Ile Ile Leu Arg Ile Thr Ser Glu Trp Asn
         210   215   220

Lys Val Arg Arg His Ser Cys Ala Val Trp Ala Gln Val Lys Asp Ser
225   230   235   240

Ser Leu Met Leu Leu Gln Met Ala Gly Val Gly Leu Gly Ser Leu Ala
                 245   250   255

```
Val Val Ile Ile Leu Thr Phe Leu Ser Phe Ser Ala Val
            260                 265
```

```
<210> 977
<211> 477
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (471)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (473)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 977
```

```
Leu Phe Ser Pro Gln Val Glu Leu Thr Lys Ala Met Val Met Glu Lys
 1               5                 10                    15

Pro Ser Pro Leu Leu Val Gly Arg Glu Phe Val Arg Gln Tyr Tyr Thr
            20                  25                    30

Leu Leu Asn Gln Ala Pro Asp Met Leu His Arg Phe Tyr Gly Lys Asn
            35                  40                  45

Ser Ser Tyr Val His Gly Gly Leu Asp Ser Asn Gly Lys Pro Ala Asp
        50                  55                  60

Ala Val Tyr Gly Gln Lys Glu Ile His Arg Lys Val Met Ser Gln Asn
65                  70                  75                    80

Phe Thr Asn Cys His Thr Lys Ile Arg His Val Asp Ala His Ala Thr
                85                  90                  95

Leu Asn Asp Gly Val Val Val Gln Val Met Gly Leu Leu Ser Asn Asn
            100                 105                 110

Asn Gln Ala Leu Arg Arg Phe Met Gln Thr Phe Val Leu Ala Pro Glu
            115                 120                 125

Gly Ser Val Ala Asn Lys Phe Tyr Val His Asn Asp Ile Phe Arg Tyr
        130                 135                 140

Gln Asp Glu Val Phe Gly Gly Phe Val Thr Glu Pro Gln Glu Glu Ser
145                 150                 155                 160
```

```
Glu Glu Glu Val Glu Glu Pro Glu Glu Arg Gln Gln Thr Pro Glu Val
            165             170             175

Val Pro Asp Asp Ser Gly Thr Phe Tyr Asp Gln Ala Val Val Ser Asn
            180             185             190

Asp Met Glu Glu His Leu Glu Glu Pro Val Ala Glu Pro Glu Pro Asp
            195             200             205

Pro Glu Pro Glu Pro Glu Gln Glu Pro Val Ser Glu Ile Gln Glu Glu
    210             215             220

Lys Pro Glu Pro Val Leu Glu Glu Thr Ala Pro Glu Asp Ala Gln Lys
225             230             235             240

Ser Ser Ser Pro Ala Pro Ala Asp Ile Ala Gln Thr Val Gln Glu Asp
            245             250             255

Leu Arg Thr Phe Ser Trp Ala Ser Val Thr Ser Lys Asn Leu Pro Pro
            260             265             270

Ser Gly Ala Val Pro Val Thr Gly Ile Pro Pro His Val Val Lys Val
            275             280             285

Pro Ala Ser Gln Pro Arg Pro Glu Ser Lys Pro Glu Ser Gln Ile Pro
    290             295             300

Pro Gln Arg Pro Gln Arg Asp Gln Arg Val Arg Glu Gln Arg Ile Asn
305             310             315             320

Ile Pro Pro Gln Arg Gly Pro Arg Pro Ile Arg Glu Ala Gly Glu Gln
            325             330             335

Gly Asp Ile Glu Pro Arg Arg Met Val Arg His Pro Asp Ser His Gln
            340             345             350

Leu Phe Ile Gly Asn Leu Pro His Glu Val Asp Lys Ser Glu Leu Lys
            355             360             365

Asp Phe Phe Gln Ser Tyr Gly Asn Val Val Glu Leu Arg Ile Asn Ser
    370             375             380

Gly Gly Lys Leu Pro Asn Phe Gly Phe Val Val Phe Asp Asp Ser Glu
385             390             395             400

Pro Val Gln Lys Val Leu Ser Asn Arg Pro Ile Met Phe Arg Gly Glu
            405             410             415

Val Arg Leu Asn Val Glu Glu Lys Lys Thr Arg Ala Ala Arg Glu Gly
            420             425             430
```

```
Asp Arg Arg Asp Asn Arg Leu Arg Gly Pro Gly Gly Pro Arg Gly Gly
        435             440             445

Leu Gly Gly Gly Met Arg Gly Pro Pro Arg Gly Gly Met Val Gln Lys
        450             455             460

Pro Gly Phe Gly Val Gly Xaa Gly Xaa Ala Pro Arg Gln
465             470             475
```

```
<210> 978
<211> 339
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (326)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (336)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (339)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 978
Pro Val Ala Ala Val Ser Gly Arg Ala Val Gly Gly Ser Arg Gly Gly
  1           5           10          15

Gly Arg Gly Gly Met Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro
          20          25          30

Trp Ala Ala Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe
          35          40          45

Ile Tyr Asn Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Glu Asn Lys
      50          55          60

Ile Leu Phe Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg
```

```
         65                    70                    75                    80

    Asn Val Gly Leu Cys Glu Ala Ile Val Gln Phe Thr Arg Thr Phe Ser
                    85                    90                    95

    Pro Ser Lys Pro Ala Lys Ser Leu His Thr Gln Lys Asn Arg Gln Phe
                    100               105               110

    Phe Asn Glu Pro Glu Glu Asn Phe Trp Met Val Met Val Val Arg Xaa
                115               120               125

    Pro Ile Ile Glu Lys Gln Ser Lys Asp Gly Lys Pro Val Ile Glu Tyr
        130               135               140

    Gln Glu Glu Glu Leu Leu Asp Lys Val Tyr Ser Ser Val Leu Arg Gln
    145               150               155               160

    Cys Tyr Ser Met Tyr Lys Leu Phe Asn Gly Thr Phe Leu Lys Ala Met
                    165               170               175

    Glu Asp Gly Gly Val Lys Leu Leu Lys Glu Arg Leu Glu Lys Phe Phe
                180               185               190

    His Arg Tyr Leu Gln Thr Leu His Leu Gln Ser Cys Asp Leu Leu Asp
                195               200               205

    Ile Phe Gly Gly Ile Ser Phe Phe Pro Leu Asp Lys Met Thr Tyr Leu
        210               215               220

    Lys Ile Gln Ser Phe Ile Asn Arg Met Glu Glu Ser Leu Asn Ile Val
    225               230               235               240

    Lys Tyr Thr Ala Phe Leu Tyr Asn Asp Gln Leu Ile Trp Ser Gly Leu
                    245               250               255

    Glu Gln Asp Asp Met Arg Ile Leu Tyr Lys Tyr Leu Thr Thr Ser Leu
                260               265               270

    Phe Pro Arg His Ile Glu Pro Glu Leu Ala Gly Arg Asp Ser Pro Ile
                275               280               285

    Arg Ala Glu Met Pro Gly Asn Leu Gln His Tyr Gly Arg Phe Leu Thr
        290               295               300

    Gly Pro Leu Asn Leu Asn Asp Pro Asp Ala Lys Cys Arg Phe Pro Lys
    305               310               315               320

    Ile Phe Val Asn Thr Xaa Asp Thr Tyr Glu Glu Leu His Leu Ile Xaa
                    325               330               335

    Tyr Lys Xaa
```

<210> 979
<211> 283
<212> PRT
<213> Homo sapiens

<400> 979
His Arg Glu Arg Arg Val Gly Leu Arg Cys Ala Arg Arg Thr Ser Glu
 1   5   10   15

Ala Ala Gly Ser Gly Ala Gly Pro Pro Gly Pro Leu Gln Gly Arg Ser
            20   25   30

Gly Ser Ser Trp Ala Pro Arg Pro Gly Arg Arg Thr Glu Glu Arg Arg
        35   40   45

Lys Gly Ala Gly Gly Thr Arg Pro Arg Pro Ala Ala Ala Met Asn Ser
    50   55   60

Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val Tyr Lys Glu
65   70   75   80

Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys Val Phe Pro
                85   90   95

Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu Gly Pro Glu
            100   105   110

Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu Leu Leu Gly
        115   120   125

Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu Thr Lys Ile
    130   135   140

Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val Asn Val Leu
145   150   155   160

Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val Leu Leu Thr
                165   170   175

Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu
            180   185   190

Glu Ala Gly Arg Leu Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg
        195   200   205

Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly
    210   215   220

```
Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser
225             230             235             240

Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Pro Met
            245             250             255

Ala Lys Lys His Ala Gly Glu Arg Asp Lys Lys Leu Ala Ala Lys Lys
            260             265             270

Lys Thr Asp Lys Lys Arg Ala Leu Arg Arg Leu
        275             280
```

```
<210> 980
<211> 353
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (333)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (346)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 980
Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met
  1             5             10             15

Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser
            20             25             30

Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser
            35             40             45

Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser
        50             55             60

Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro
 65             70             75             80

Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile
            85             90             95

Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu
            100             105             110
```

```
Asp His Asn Leu Leu Glu Asn Ser Lys Ile Lys Gly Arg Val Phe Ser
        115                 120                 125

Lys Leu Lys Gln Leu Lys Lys Leu His Ile Asn His Asn Asn Leu Thr
    130                 135                 140

Glu Ser Val Gly Pro Leu Pro Lys Ser Leu Glu Asp Leu Gln Leu Thr
145                 150                 155                 160

His Asn Lys Ile Thr Lys Leu Gly Ser Phe Glu Gly Leu Val Asn Leu
                165                 170                 175

Thr Phe Ile His Leu Gln His Asn Arg Leu Lys Glu Asp Ala Val Ser
                180                 185                 190

Ala Ala Phe Lys Gly Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser Phe
        195                 200                 205

Asn Gln Ile Ala Arg Leu Pro Ser Gly Leu Pro Val Ser Leu Leu Thr
    210                 215                 220

Leu Tyr Leu Asp Asn Asn Lys Ile Ser Asn Ile Pro Asp Glu Tyr Phe
225                 230                 235                 240

Lys Arg Phe Asn Ala Leu Gln Tyr Leu Arg Leu Ser His Asn Glu Leu
                245                 250                 255

Ala Asp Ser Gly Ile Pro Gly Asn Ser Phe Asn Val Ser Ser Leu Val
                260                 265                 270

Glu Leu Asp Leu Ser Tyr Asn Lys Leu Lys Asn Ile Pro Thr Val Asn
        275                 280                 285

Glu Asn Leu Glu Asn Tyr Tyr Leu Glu Val Asn Gln Leu Glu Lys Phe
    290                 295                 300

Asp Ile Lys Ser Phe Cys Lys Ile Leu Gly Pro Leu Ser Tyr Ser Lys
305                 310                 315                 320

Ile Lys His Leu Arg Leu Asp Gly Asn Arg Ile Ser Xaa Thr Ser Leu
                325                 330                 335

Pro Pro Asp Met Tyr Glu Cys Leu Arg Xaa Ala Asn Glu Val Thr Leu
                340                 345                 350

Asn
```

<210> 981
<211> 343
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (343)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 981
```
Asn Leu Thr Lys Asn Met Thr Ala Leu Ser Ser Glu Asn Cys Ser Phe
 1               5                  10                  15

Gln Tyr Gln Leu Arg Gln Thr Asn Gln Pro Leu Asp Val Asn Tyr Leu
            20                  25                  30

Leu Phe Leu Ile Ile Leu Gly Lys Ile Leu Leu Asn Ile Leu Thr Leu
        35                  40                  45

Gly Met Arg Arg Lys Asn Thr Cys Gln Asn Phe Met Glu Tyr Phe Cys
    50                  55                  60

Ile Ser Leu Ala Phe Val Asp Leu Leu Leu Leu Val Asn Ile Ser Ile
65                  70                  75                  80

Ile Leu Tyr Phe Arg Asp Phe Val Leu Leu Ser Ile Arg Phe Thr Lys
            85                  90                  95

Tyr His Ile Cys Leu Phe Thr Gln Ile Ile Ser Phe Thr Tyr Gly Phe
            100                 105                 110

Leu His Tyr Pro Val Phe Leu Thr Ala Cys Ile Asp Tyr Cys Leu Asn
        115                 120                 125

Phe Ser Lys Thr Thr Lys Leu Ser Phe Lys Cys Gln Lys Leu Phe Tyr
    130                 135                 140

Phe Phe Thr Val Ile Leu Ile Trp Ile Ser Val Leu Ala Tyr Val Leu
145                 150                 155                 160

Gly Asp Pro Ala Ile Tyr Gln Ser Leu Lys Ala Gln Asn Ala Tyr Ser
                165                 170                 175

Arg His Cys Pro Phe Tyr Val Ser Ile Gln Ser Tyr Trp Leu Ser Phe
            180                 185                 190

Phe Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu
        195                 200                 205

Val Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu
```

```
          210                    215                    220

Thr Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg
225             230             235                    240

Ser Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr
                245             250             255

Trp Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val
            260             265             270

Gln Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val
            275             280             285

Asn Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu
    290             295             300

Asn Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys
305             310             315                    320

Cys Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys
            325             330             335

Pro Ile Ser Ile Met Ile Xaa
            340
```

<210> 982
<211> 142
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 982
Gly Leu Pro Pro Ser Thr Phe Leu His Ser Ala Val Ser Thr Leu Pro
 1   5   10   15

His Arg Pro Ser Pro Pro Ser Leu Leu Pro Ala Pro Cys Lys Pro Leu
            20   25   30

Arg Leu Gly Leu Ala Thr Val Pro Ala Gly Ser Pro Gly Leu Gly Val
        35   40   45

Gly Asp Ser Leu Gln Ala Arg Ser Pro Glu Thr Ser Glu Gly His Pro
    50   55   60

Leu Arg Val Ala Arg Pro Pro Val Ala Asn Leu Ser Ala Ala Ser Ala
65   70   75   80

Thr Ser Pro Ala Gly Pro Trp Phe Arg Trp Pro Pro Arg Cys Leu Ala
                85   90   95

Glu Thr Arg His Gly Pro Ser Ala Gly Pro His Xaa Phe Pro Xaa Pro
            100   105   110

Gly Xaa Trp His Cys Ser Arg Gln Xaa Xaa Gly His Gln Xaa Xaa Asn
        115   120   125

Arg Thr Gln Xaa Pro Ala Gln Thr Ala Ala Gly Met Gly Ala
    130   135   140

```
<210> 983
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 983
Val Asn Phe Lys Ala Phe Glu Met Gly Lys Asp Tyr Tyr Cys Ile Leu
 1               5                  10                  15

Gly Ile Glu Lys Gly Ala Ser Asp Glu Asp Ile Lys Lys Ala Tyr Arg
                20                  25                  30

Lys Gln Ala Leu Lys Phe His Pro Asp Lys Asn Lys Ser Pro Gln Ala
             35                  40                  45

Glu Glu Lys Phe Lys Glu Val Ala Glu Ala Tyr Glu Val Leu Ser Asp
     50                  55                  60

Pro Lys Lys Arg Glu Ile Tyr Xaa Gln Phe Gly Glu Glu Gly Leu Lys
 65                  70                  75                  80

Gly Gly Ala Gly Gly Thr Asp Gly Gln Gly Gly Thr Phe Arg Tyr Thr
                 85                  90                  95

Phe His Gly Asp Pro His Ala Thr Phe Ala Ala Phe Phe Gly Gly Ser
             100                 105                 110

Asn Pro Phe Glu Ile Phe Phe Gly Arg Arg Met Gly Gly Gly Arg Asp
             115                 120                 125

Ser Glu Glu Met Glu Ile Xaa Gly Asp Pro Xaa Ser Ala Phe Gly Phe
     130                 135                 140

Ser Met Asn Gly Tyr Pro Arg Asp Arg Asn Ser Val Gly Pro Ser Arg
145                 150                 155                 160
```

```
Leu Lys Gln Asp Pro Pro Val Ile His Glu Leu Arg Val Ser Leu Glu
            165             170             175

Glu Ile Tyr Ser Gly Cys Thr Lys Arg Asp Glu Arg Phe Leu Glu Lys
            180             185             190

Gly
```

<210> 984
<211> 402
<212> PRT
<213> Homo sapiens

<400> 984
```
Lys Ser Tyr Glu Met Glu Leu Glu Glu Gly Lys Ala Gly Ser Gly Leu
  1           5               10              15

Arg Gln Tyr Tyr Leu Ser Lys Ile Glu Glu Leu Gln Leu Ile Val Asn
            20              25              30

Asp Lys Ser Gln Asn Leu Arg Arg Leu Gln Ala Gln Arg Asn Glu Leu
            35              40              45

Asn Ala Lys Val Arg Leu Leu Arg Glu Glu Leu Gln Leu Leu Gln Glu
      50              55              60

Gln Gly Ser Tyr Val Gly Glu Val Val Arg Ala Met Asp Lys Lys Lys
  65              70              75              80

Val Leu Val Lys Val His Pro Glu Gly Lys Phe Val Val Asp Val Asp
            85              90              95

Lys Asn Ile Asp Ile Asn Asp Val Thr Pro Asn Cys Arg Val Ala Leu
            100             105             110

Arg Asn Asp Ser Tyr Thr Leu His Lys Ile Leu Pro Asn Lys Val Asp
            115             120             125

Pro Leu Val Ser Leu Met Met Val Glu Lys Val Pro Asp Ser Thr Tyr
      130             135             140

Glu Met Ile Gly Gly Leu Asp Lys Gln Ile Lys Glu Ile Lys Glu Val
145             150             155             160

Ile Glu Leu Pro Val Lys His Pro Glu Leu Phe Glu Ala Leu Gly Ile
            165             170             175
```

```
Ala Gln Pro Lys Gly Val Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys
        180             185             190

Thr Leu Leu Ala Arg Ala Val Ala His His Thr Asp Cys Thr Phe Ile
        195             200             205

Arg Val Ser Gly Ser Glu Leu Val Gln Lys Phe Ile Gly Glu Gly Ala
        210             215             220

Arg Met Val Arg Glu Leu Phe Val Met Ala Arg Glu His Ala Pro Ser
225             230             235             240

Ile Ile Phe Met Asp Glu Ile Asp Ser Ile Gly Ser Ser Arg Leu Glu
                245             250             255

Gly Gly Ser Gly Gly Asp Ser Glu Val Gln Arg Thr Met Leu Glu Leu
            260             265             270

Leu Asn Gln Leu Asp Gly Phe Glu Ala Thr Lys Asn Ile Lys Val Ile
        275             280             285

Met Ala Thr Asn Arg Ile Asp Ile Leu Asp Ser Ala Leu Leu Arg Pro
    290             295             300

Gly Arg Ile Asp Arg Lys Ile Glu Phe Pro Pro Pro Asn Glu Glu Ala
305             310             315             320

Arg Leu Asp Ile Leu Lys Ile His Ser Arg Lys Met Asn Leu Thr Arg
            325             330             335

Gly Ile Asn Leu Arg Lys Ile Ala Glu Leu Met Pro Gly Ala Ser Gly
            340             345             350

Ala Glu Val Lys Gly Val Cys Thr Glu Ala Gly Met Tyr Ala Leu Arg
        355             360             365

Glu Arg Arg Val His Val Thr Gln Glu Asp Phe Glu Met Ala Val Ala
    370             375             380

Lys Val Met Gln Lys Asp Ser Glu Lys Asn Met Ser Ile Lys Lys Leu
385             390             395             400

Trp Lys
```

<210> 985
<211> 347
<212> PRT
<213> Homo sapiens

952

```
<400> 985
Arg Arg Arg Arg Trp His Pro Gly Pro Gly Gly Pro Arg Arg Thr Ala
 1           5                  10                15

Gly Lys Gly Pro Arg Lys Val Ala Ser Ala Ser Ala Ala Ala Ser Thr
            20                  25                30

Leu Ser Glu Pro Pro Arg Arg Thr Gln Glu Ser Arg Thr Arg Thr Arg
        35              40                  45

Ala Leu Gly Leu Pro Thr Leu Pro Met Glu Lys Leu Ala Ala Ser Thr
    50              55                  60

Glu Pro Gln Gly Pro Arg Pro Val Leu Gly Arg Glu Ser Val Gln Val
65                  70                  75                  80

Pro Asp Asp Gln Asp Phe Arg Ser Phe Arg Ser Glu Cys Glu Ala Glu
            85                  90                  95

Val Gly Trp Asn Leu Thr Tyr Ser Arg Ala Gly Val Ser Val Trp Val
            100                 105                 110

Gln Ala Val Glu Met Asp Arg Thr Leu His Lys Ile Lys Cys Arg Met
        115                 120                 125

Glu Cys Cys Asp Val Pro Ala Glu Thr Leu Tyr Asp Val Leu His Asp
    130                 135                 140

Ile Glu Tyr Arg Lys Lys Trp Asp Ser Asn Val Ile Glu Thr Phe Asp
145                 150                 155                 160

Ile Ala Arg Leu Thr Val Asn Ala Asp Val Gly Tyr Tyr Ser Trp Arg
            165                 170                 175

Cys Pro Lys Pro Leu Lys Asn Arg Asp Val Ile Thr Leu Arg Ser Trp
            180                 185                 190

Leu Pro Met Gly Ala Asp Tyr Ile Ile Met Asn Tyr Ser Val Lys His
        195                 200                 205

Pro Lys Tyr Pro Pro Arg Lys Asp Leu Val Arg Ala Val Ser Ile Gln
    210                 215                 220

Thr Gly Tyr Leu Ile Gln Ser Thr Gly Pro Lys Ser Cys Val Ile Thr
225                 230                 235                 240

Tyr Leu Ala Gln Val Asp Pro Lys Gly Ser Leu Pro Lys Trp Val Val
            245                 250                 255

Asn Lys Ser Ser Gln Phe Leu Ala Pro Lys Ala Met Lys Lys Met Tyr
```

```
                 260                  265                  270

   Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys His Leu Pro His
            275                  280                  285

   Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Leu Pro Ser Leu Ala
            290                  295                  300

   Leu Ser Glu Leu Ser Val Gln His Ala Asp Ser Leu Glu Asn Ile Asp
   305                  310                  315                  320

   Glu Ser Ala Val Ala Glu Ser Arg Glu Glu Arg Met Gly Gly Ala Gly
                    325                  330                  335

   Gly Glu Gly Ser Asp Asp Asp Thr Ser Leu Thr
                    340                  345
```

<210> 986
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 986
```
Ala Ser Ile Cys Ala Asp Ala Lys Leu Trp Thr Met Tyr Ala Arg Pro
 1               5                  10                  15

Ser Asn Arg Gln Arg Cys Leu Gly Ser Lys His Thr Glu Arg Thr Trp
            20                  25                  30

Thr Ala Trp Xaa Arg Ser Leu Ile Arg Pro Phe Ser Met His Ile Leu
            35                  40                  45

Pro Lys Gln Ser Gln Ile Pro Leu Lys Gly Ala Asp Ser Ile Ser Ser
    50                  55                  60

Ser Val Gln Thr Leu Arg Ala Glu Arg Ser Gly Ser Gly Ser His Val
65                  70                  75                  80

Thr Ala Gln Asn Asn Leu Arg Asn Pro Leu Cys Pro Glu Gly Ser Leu
                85                  90                  95

Thr Ser Pro Ser Gly Ser Glu Gln Ser Leu
            100                  105
```

```
<210> 987
<211> 172
<212> PRT
<213> Homo sapiens

<400> 987
Thr Pro Arg Gly Ala Val Lys Pro Ser Ala Asn Lys Tyr Pro Ile Phe
  1               5                  10                  15

Phe Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe
            20                  25                  30

Pro Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys
          35                  40                  45

Gly Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys
      50                  55                  60

Phe Thr Gly Tyr Gln Ala Ile Gln Gln Gln Ser Ser Ser Glu Thr Glu
 65                  70                  75                  80

Gly Glu Gly Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp
                85                  90                  95

Arg Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly
            100                 105                 110

Ser Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser
          115                 120                 125

Arg Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu
      130                 135                 140

Asn Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn
145                 150                 155                 160

Thr Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr
                165                 170


<210> 988
<211> 238
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (101)
```

955 .

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 988
Ala Lys Gln Asp Pro Val Pro Glu Gln Glu Met Ser Pro Ser Ile Ser
 1   5   10   15

Asp Pro Cys Leu Gly Gln Ala Leu Met Gly Gly Pro Ser Phe Lys Ala
            20   25   30

Val Val Gly Thr Ala Pro Pro Asn Ala Ser Leu Ser Phe Leu Pro Ile
            35   40   45

His Gln Tyr Thr Ala Gly Pro Phe Leu Val Phe Val Gln Gln Glu Thr
    50   55   60

His Phe Trp Trp Asp Met Pro Ser Ser Ala Thr Gly Pro Leu Thr Pro
65   70   75   80

Cys Ile Ser Val Leu Pro Val Ser Ala Gly Thr Asp Ser Lys Gly Lys
            85   90   95

Pro Ser Val Trp Xaa Ile Gly Gly Trp Glu Gln Arg Gly Glu Asn Ala
            100   105   110

Val Leu Ser Phe Cys Leu Gly Ile Pro His Thr Thr Trp Val Leu Pro
    115   120   125

Gly Lys Pro Val Leu Ser Lys Thr Met Asp Leu Ala Ser Pro Thr Gly
    130   135   140

Leu Xaa Ser Gln His Leu Arg Glu Gly Gly Trp Lys Arg Leu Cys Pro
145   150   155   160

His Phe Glu Leu Gln Ala Gly Ser Ala Ala Leu Lys Pro Ser Ser Asp
            165   170   175

Phe Leu Thr Gln Asp Pro Ala Pro Gly Arg Arg Arg Val Gly Ala Gly
            180   185   190

Leu Val Gly Gln Lys Glu Ala Ser Ala Gly Leu Glu Asp Pro Ser Ser
            195   200   205

Thr Ser His Ser Val Ser Ser Ser Trp Glu Asn Leu Cys Gln Ala Arg
    210   215   220

Ala Val Ile Gly Pro His Glu Val Ser Glu Ala Pro Ser Trp

956

225   230   235

<210> 989
<211> 74
<212> PRT
<213> Homo sapiens

<400> 989
Ser Leu Ile Lys Ala Leu Tyr Ile Leu Tyr Gly Phe Arg His His His
 1   5   10   15

Thr Lys Lys Leu Thr Pro Ser Ile Pro Val Phe Val Gly Gln Ala Ser
            20   25   30

Phe Phe Ser Pro Cys Ser Val Ser His Thr Val Cys Leu Gln Lys Leu
        35   40   45

Leu Ile Gly Ala Lys Tyr Asn Cys Gln Tyr Asn Leu Lys Thr Thr Met
    50   55   60

Cys Pro Arg Arg Pro Thr Cys Leu Phe Pro
65   70

<210> 990
<211> 295
<212> PRT
<213> Homo sapiens

<400> 990
Ala Pro Ala Arg Pro Gly Ser Leu Pro Ser Thr Arg Ser Ala Pro Leu
 1   5   10   15

Val Pro Ser Ser Arg Arg Arg Pro Ala Glu Ser Pro Leu Arg Ser Arg
            20   25   30

Arg Cys Arg Gly Asp Met Val Leu Cys Val Gln Gly Pro Arg Pro Leu
        35   40   45

Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro Ser Leu
    50   55   60

Glu Leu Pro Lys Pro Val Met Gln Pro Leu Pro Ala Gly Ala Phe Leu
65   70   75   80

Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu Pro Lys
                85   90   95

Val Leu Asp Pro Glu Glu Asp Leu Leu Cys Ile Ala Lys Thr Phe Ser
            100   105   110

Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala Ser Glu
            115   120   125

Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu Val Arg
    130   135   140

Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys Thr Thr
145   150   155   160

Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser Phe Arg
                165   170   175

Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe Pro Asp
            180   185   190

Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala Asp Thr
            195   200   205

Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro Met Pro
    210   215   220

Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro Pro Ala
225   230   235   240

Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg Ser Ser
                245   250   255

Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg Leu Val
            260   265   270

Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp Tyr Leu
    275   280   285

Arg Gln Tyr Pro Phe Gln Leu
    290   295

<210> 991
<211> 58
<212> PRT
<213> Homo sapiens

<400> 991
Leu His Lys Val Ser Ile Leu Leu Tyr Ser Ala Val Leu Val Ser Phe
  1   5   10   15

Ser Cys Ile Gly Phe His Cys Ile Tyr Ser Leu Phe Met Leu Asn Leu

958

	20			25			30	

Ala Lys Asp Glu His Cys Pro Pro Leu Lys Cys Leu Cys His Phe Glu
        35   40   45

Phe Cys Ala Asn Phe Val Ala Arg Met Arg
      50   55

<210> 992
<211> 203
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 992
Ala His Ala Ser Pro Thr Arg Xaa Glu Ala Arg Val Val Val Val Arg
  1   5   10   15

Cys Leu Pro Ala Cys Val Arg Asp Leu Pro Asp Ser Val Ala Ala Met
            20   25   30

Ala Ser Asp Glu Gly Lys Leu Phe Val Gly Gly Leu Ser Phe Asp Thr
        35   40   45

Asn Glu Gln Ser Leu Glu Gln Val Phe Ser Lys Tyr Gly Gln Ile Ser
    50   55   60

Glu Val Val Val Val Lys Asp Arg Glu Thr Gln Arg Ser Arg Gly Phe
  65   70   75   80

Gly Phe Val Thr Phe Glu Asn Ile Asp Asp Ala Lys Asp Ala Met Met
              85   90   95

Ala Met Asn Gly Lys Ser Val Asp Gly Arg Gln Ile Arg Val Asp Gln
            100   105   110

Ala Gly Lys Ser Ser Asp Asn Arg Ser Arg Gly Tyr Arg Gly Gly Ser
            115   120   125

Ala Gly Gly Arg Gly Phe Phe Arg Gly Gly Arg Gly Arg Gly Arg Gly
        130   135   140

Phe Ser Arg Gly Gly Gly Asp Arg Gly Tyr Gly Gly Asn Arg Phe Glu
145   150   155   160

```
Ser Arg Ser Gly Gly Tyr Gly Gly Ser Arg Asp Tyr Tyr Ser Ser Arg
              165                 170                 175

Ser Gln Ser Gly Gly Tyr Ser Asp Arg Ser Ser Gly Gly Ser Tyr Arg
              180                 185                 190

Asp Ser Tyr Asp Ser Tyr Ala Thr His Asn Glu
              195                 200
```

```
<210> 993
<211> 252
<212> PRT
<213> Homo sapiens

<400> 993
Gly Gly Leu Ala Trp Arg Ala Leu Arg Thr Ser Gly Thr Leu Leu Arg
  1               5                 10                  15

Val Glu Arg Leu Leu Leu Glu Asp Tyr Cys Pro Glu Glu Lys Met Phe
              20                 25                  30

Gly Phe His Lys Pro Lys Met Tyr Arg Ser Ile Glu Gly Cys Cys Ile
         35                 40                  45

Cys Arg Ala Lys Ser Ser Ser Arg Phe Thr Asp Ser Lys Arg Tyr
       50              55                 60

Glu Lys Asp Phe Gln Ser Cys Phe Gly Leu His Glu Thr Arg Ser Gly
 65                 70                 75                  80

Asp Ile Cys Asn Ala Cys Val Leu Leu Val Lys Arg Trp Lys Lys Leu
              85                 90                  95

Pro Ala Gly Ser Lys Lys Asn Trp Asn His Val Val Asp Ala Arg Ala
             100                105                 110

Gly Pro Ser Leu Lys Thr Thr Leu Lys Pro Lys Lys Val Lys Thr Leu
             115                120                 125

Ser Gly Asn Arg Ile Lys Ser Asn Gln Ile Ser Lys Leu Gln Lys Glu
             130                135                 140

Phe Lys Arg His Asn Ser Asp Ala His Ser Thr Thr Ser Ser Ala Ser
145                 150                155                 160

Pro Ala Gln Ser Pro Cys Tyr Ser Asn Gln Ser Asp Asp Gly Ser Asp
             165                170                 175

Thr Glu Met Ala Ser Gly Ser Asn Arg Thr Pro Val Phe Ser Phe Leu
```

```
                    180                    185                    190

    Asp Leu Thr Tyr Trp Lys Arg Gln Lys Ile Cys Cys Gly Ile Ile Tyr
            195                200                205


    Lys Gly Arg Phe Gly Glu Val Leu Ile Asp Thr His Leu Phe Lys Pro
            210                215                220


    Cys Cys Ser Asn Lys Lys Ala Ala Ala Glu Lys Pro Glu Glu Gln Gly
    225                230                235                240


    Gln Ser Leu Cys Pro Ser Pro Leu Arg Ser Gly Asp
                    245                250
```

<210> 994
<211> 170
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 994

```
    Arg Thr Arg Gly Xaa Asp Thr Gln Pro Thr Val Cys Thr Asp Ala Pro
     1               5                10                15


    Ser Leu Leu Pro Leu Ser Arg Leu His Leu Arg Gly Ser Trp Asp Arg
                    20                25                30


    Arg Ser Val Ala Asn Met Gln Leu Phe Val Arg Ala Gln Glu Leu His
            35                40                45


    Thr Phe Glu Val Thr Gly Gln Glu Thr Val Ala Gln Ile Lys Ala His
            50                55                60


    Val Ala Ser Leu Glu Gly Ile Ala Pro Glu Asp Gln Val Val Leu Leu
    65                70                75                80


    Ala Gly Ala Pro Leu Glu Asp Glu Ala Thr Leu Gly Gln Cys Gly Val
                    85                90                95


    Glu Ala Leu Thr Thr Leu Glu Val Ala Gly Arg Met Leu Gly Gly Lys
                    100                105                110


    Val His Gly Ser Leu Ala Arg Ala Gly Lys Val Arg Gly Gln Thr Pro
            115                120                125
```

```
Lys Val Ala Lys Gln Glu Lys Lys Lys Lys Thr Gly Arg Ala Lys
    130             135             140
```

```
Arg Arg Met Gln Tyr Asn Arg Arg Phe Val Asn Val Val Pro Thr Phe
145             150             155             160
```

```
Gly Lys Lys Lys Gly Pro Asn Ala Asn Ser
            165             170
```

<210> 995
<211> 156
<212> PRT
<213> Homo sapiens

<400> 995
```
Gly Ser Gly Thr His Pro Ala Arg Ala Ala Pro Ala Pro His Ala Arg
 1               5               10              15
```

```
Ala Ser Phe Ser Arg Pro Leu Ala Pro Arg Arg Ser His Leu Ser Ser
            20              25              30
```

```
Leu Ala His Ala Arg Pro Ala Arg Glu Pro Arg Arg Arg Leu Gly Pro
        35              40              45
```

```
Ala Glu Ala Pro Pro Arg His Val Phe Ala Ser Arg Arg Lys Leu Glu
    50              55              60
```

```
Thr Lys Ala Gly His Pro Pro Ala Val Lys Ala Gly Gly Met Arg Ile
65              70              75              80
```

```
Val Gln Lys His Pro His Thr Gly Asp Thr Lys Glu Glu Lys Asp Lys
            85              90              95
```

```
Asp Asp Gln Glu Trp Glu Ser Pro Ser Pro Lys Pro Thr Val Phe
            100             105             110
```

```
Ile Ser Gly Val Ile Ala Arg Gly Asp Lys Asp Phe Pro Pro Ala Ala
        115             120             125
```

```
Ala Gln Val Ala His Gln Lys Pro His Ala Ser Met Asp Lys His Pro
    130             135             140
```

```
Ser Pro Arg Thr Gln His Ile Gln Gln Pro Arg Lys
145             150             155
```

<210> 996
<211> 217

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 996
Asn Ser Ala Glu Gln Glu Gly Ser Gln Trp Ser Leu Pro Val Leu His
 1               5                   10                  15

Ser Val Pro Asp Pro Ala Cys Leu Thr Leu Xaa Arg Val Ser Lys Gly
             20                  25                  30

Leu Ala Ala Val Arg Ser Ser Val Pro Arg Ala Gly Gly Val Ser Arg
         35                  40                  45

Arg Leu Ala Ala Val Arg Ser Thr Val Leu Cys Arg Ala Val Gly Cys
     50                  55                  60

Ile Leu Ala Glu Leu Leu Ala His Arg Pro Leu Leu Pro Gly Thr Ser
 65                  70                  75                  80

Glu Ile His Gln Ile Asp Leu Ile Val Gln Leu Leu Gly Thr Pro Ser
                 85                  90                  95

Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu Pro Leu Val Gly Gln Tyr
             100                 105                 110

Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu Lys His Lys Phe Pro Trp
         115                 120                 125

Leu Ser Glu Ala Gly Leu Arg Cys Cys Thr Ser Cys Ser Cys Thr Thr
     130                 135                 140

Leu Arg Lys Gly Arg Arg Pro Gly Thr Ala Trp Arg Ala Pro Ile Ser
145                 150                 155                 160

Arg Arg Ser Pro Tyr Pro Val Ser Arg Ser Ser Cys Arg Pro Phe Pro
                 165                 170                 175

Thr Thr Ala Thr Ser Gly Pro Pro Gln Pro Pro Pro Arg Ala Arg Ala
                 180                 185                 190

Ser Ala Val Asn Pro Asp Gly Gly Pro Gly Thr Arg Leu Tyr Ser His
             195                 200                 205

Thr Arg Ser Ser Asp Gln Trp Cys Leu
     210                 215
```

<210> 997
<211> 466
<212> PRT
<213> Homo sapiens

<400> 997
Val Ser Pro Arg Ala Gly Gly Ala Gly Asn Asn Arg Gly Arg Ala His
 1   5   10   15

Arg Ala Ser Ser Cys Ser Leu Pro Ala Pro Pro Ala Thr Leu Asp Pro
             20   25   30

Arg Ile Pro Pro Ala Arg Leu Pro Ala Met Ala Asp Lys Glu Ala Ala
         35   40   45

Phe Asp Asp Ala Val Glu Glu Arg Val Ile Asn Glu Glu Tyr Lys Ile
     50   55   60

Trp Lys Lys Asn Thr Pro Phe Leu Tyr Asp Leu Val Met Thr His Ala
 65   70   75   80

Leu Glu Trp Pro Ser Leu Thr Ala Gln Trp Leu Pro Asp Val Thr Arg
                 85   90   95

Pro Glu Gly Lys Asp Phe Ser Ile His Arg Leu Val Leu Gly Thr His
             100   105   110

Thr Ser Asp Glu Gln Asn His Leu Val Ile Ala Ser Val Gln Leu Pro
         115   120   125

Asn Asp Asp Ala Gln Phe Asp Ala Ser His Tyr Asp Ser Glu Lys Gly
     130   135   140

Glu Phe Gly Gly Phe Gly Ser Val Ser Gly Lys Ile Glu Ile Glu Ile
145   150   155   160

Lys Ile Asn His Glu Gly Glu Val Asn Arg Ala Arg Tyr Met Pro Gln
                 165   170   175

Asn Pro Cys Ile Ile Ala Thr Lys Thr Pro Ser Ser Asp Val Leu Val
             180   185   190

Phe Asp Tyr Thr Lys His Pro Ser Lys Pro Asp Pro Ser Gly Glu Cys
         195   200   205

Asn Pro Asp Leu Arg Leu Arg Gly His Gln Lys Glu Gly Tyr Gly Leu
     210   215   220

Ser Trp Asn Pro Asn Leu Ser Gly His Leu Leu Ser Ala Ser Asp Asp

964

His Thr Ile Cys Leu Trp Asp Ile Ser Ala Val Pro Lys Glu Gly Lys
                245   250   255

Val Val Asp Ala Lys Thr Ile Phe Thr Gly His Thr Ala Val Val Glu
            260   265   270

Asp Val Ser Trp His Leu Leu His Glu Ser Leu Phe Gly Ser Val Ala
            275   280   285

Asp Asp Gln Lys Leu Met Ile Trp Asp Thr Arg Ser Asn Asn Thr Ser
    290   295   300

Lys Pro Ser His Ser Val Asp Ala His Thr Ala Glu Val Asn Cys Leu
305   310   315   320

Ser Phe Asn Pro Tyr Ser Glu Phe Ile Leu Ala Thr Gly Ser Ala Asp
                325   330   335

Lys Thr Val Ala Leu Trp Asp Leu Arg Asn Leu Lys Leu Lys Leu His
            340   345   350

Ser Phe Glu Ser His Lys Asp Glu Ile Phe Gln Val Gln Trp Ser Pro
            355   360   365

His Asn Glu Thr Ile Leu Ala Ser Ser Gly Thr Asp Arg Arg Leu Asn
    370   375   380

Val Trp Asp Leu Ser Lys Ile Gly Glu Glu Gln Ser Pro Glu Asp Ala
385   390   395   400

Glu Asp Gly Pro Pro Glu Leu Leu Phe Ile His Gly Gly His Thr Ala
            405   410   415

Lys Ile Ser Asp Phe Ser Trp Asn Pro Asn Glu Pro Trp Val Ile Cys
            420   425   430

Ser Val Ser Glu Asp Asn Ile Met Gln Val Trp Gln Met Ala Glu Asn
    435   440   445

Ile Tyr Asn Asp Glu Asp Pro Glu Gly Ser Val Asp Pro Glu Gly Gln
    450   455   460

Gly Ser
465

<210> 998
<211> 165

<212> PRT
<213> Homo sapiens

<400> 998
Thr Arg Pro Pro Thr Arg Arg Pro Thr Arg Pro Pro Lys Ala Lys Lys
 1   5   10   15

Glu Ala Pro Ala Pro Pro Lys Ala Glu Ala Lys Ala Lys Ala Leu Lys
                20   25   30

Ala Lys Lys Ala Val Leu Lys Gly Val His Ser His Lys Lys Lys Lys
        35   40   45

Ile Arg Thr Ser Pro Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg
    50   55   60

Arg Gln Pro Lys Tyr Pro Arg Lys Ser Ala Pro Arg Arg Asn Lys Leu
65   70   75   80

Asp His Tyr Ala Ile Ile Lys Phe Pro Leu Thr Thr Glu Ser Ala Met
                85   90   95

Lys Lys Ile Glu Asp Asn Asn Thr Leu Val Phe Ile Val Asp Val Lys
            100   105   110

Ala Asn Lys His Gln Ile Lys Gln Ala Val Lys Lys Leu Tyr Asp Ile
            115   120   125

Asp Val Ala Lys Val Asn Thr Leu Ile Arg Pro Asp Gly Glu Lys Lys
    130   135   140

Ala Tyr Val Arg Leu Ala Pro Asp Tyr Asp Ala Leu Asp Val Ala Asn
145   150   155   160

Lys Ile Gly Ile Ile
                165

<210> 999
<211> 194
<212> PRT
<213> Homo sapiens

<400> 999
Pro Glu Asn Ser Thr Ser Ser Phe Leu Leu Trp Gly Cys Pro Pro Ser
 1   5   10   15

Val Val Cys Phe Thr Val Gly Ser Pro Ala Arg Arg Pro Gln Cys Phe
                20   25   30

```
Leu Arg Ala Glu Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser
        35              40              45

Met Ala Leu Leu Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro
    50              55              60

Gln Trp Gln Met Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln
65              70              75              80

Ala Met Tyr Lys Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly
            85          -       90              95

Met Met Ser Cys Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala
            100             105             110

Leu Gln Ala Thr Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe
        115             120             125

Leu Ala Met Phe Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly
    130             135             140

Gly Asp Asp Lys Val Lys Lys Ala Arg Ile Ala Met Gly Gly Gly Ile
145             150             155             160

Ile Phe Ile Val Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr
            165             170             175

Gly His Gln Ile Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn
            180             185             190

Ile Lys
```

```
<210> 1000
<211> 362
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1000
Arg Gln Gln Arg Thr Arg Lys Lys Pro Ala Gly Ala Ala Leu Gly
1           5               10              15

Ala Leu Gly Pro Arg Ala Gln Leu Xaa Ala Ala Ala Gln Thr Asn Ser
            20              25              30
```

```
Asn Ala Ala Gly Lys Gln Leu Arg Lys Glu Ser Gln Lys Asp Arg Lys
        35                  40                  45

Asn Pro Leu Pro Pro Ser Val Gly Val Val Asp Lys Lys Glu Glu Thr
        50                  55                  60

Gln Pro Pro Val Ala Leu Lys Lys Glu Gly Ile Arg Arg Val Gly Arg
65                  70                  75                      80

Arg Pro Asp Gln Gln Leu Gln Gly Glu Gly Lys Ile Ile Asp Arg Arg
                85                  90                  95

Pro Glu Arg Arg Pro Pro Arg Glu Arg Arg Phe Glu Lys Pro Leu Glu
            100                 105                 110

Glu Lys Gly Glu Gly Gly Glu Phe Ser Val Asp Arg Pro Ile Ile Asp
            115                 120                 125

Arg Pro Ile Arg Gly Arg Gly Gly Leu Gly Arg Gly Arg Gly Gly Arg
    130                 135                 140

Gly Arg Gly Met Gly Arg Gly Asp Gly Phe Asp Ser Arg Gly Lys Arg
145                 150                 155                 160

Glu Phe Asp Arg His Ser Gly Ser Asp Arg Ser Ser Phe Ser His Tyr
                165                 170                 175

Ser Gly Leu Lys His Glu Asp Lys Arg Gly Gly Ser Gly Ser His Asn
            180                 185                 190

Trp Gly Thr Val Lys Asp Glu Leu Thr Asp Leu Asp Gln Ser Asn Val
        195                 200                 205

Thr Glu Glu Thr Pro Glu Gly Glu Glu His His Pro Val Ala Asp Thr
    210                 215                 220

Glu Asn Lys Glu Asn Glu Val Glu Glu Val Lys Glu Glu Gly Pro Lys
225                 230                 235                 240

Glu Met Thr Leu Asp Glu Trp Lys Ala Ile Gln Asn Lys Asp Arg Ala
            245                 250                 255

Lys Val Glu Phe Asn Ile Arg Lys Pro Asn Glu Gly Ala Asp Gly Gln
            260                 265                 270

Trp Lys Lys Gly Phe Val Leu His Lys Ser Lys Ser Glu Glu Ala His
        275                 280                 285

Ala Glu Asp Ser Val Met Asp His His Phe Arg Lys Pro Ala Asn Asp
        290                 295                 300
```

Ile Thr Ser Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly
305   310   315   320

Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Gly Arg Pro
            325   330   335

Asn Arg Gly Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val
            340   345   350

Asp Asp Pro Glu Ala Phe Pro Ala Leu Ala
        355   360

<210> 1001
<211> 207
<212> PRT
<213> Homo sapiens

<400> 1001
Leu Met Ser Val Val Arg Gly Phe Ser Glu Ala Ala Ala Gln Tyr Asn
  1   5   10   15

Pro Glu Pro Pro Pro Arg Thr His Tyr Ser Asn Ile Glu Ala Asn
            20   25   30

Glu Ser Glu Glu Val Arg Gln Phe Arg Arg Leu Phe Ala Gln Leu Ala
        35   40   45

Gly Asp Asp Met Glu Val Ser Ala Thr Glu Leu Met Asn Ile Leu Asn
    50   55   60

Lys Val Val Thr Arg His Pro Asp Leu Lys Thr Asp Gly Phe Gly Ile
65   70   75   80

Asp Thr Cys Arg Ser Met Val Ala Val Met Asp Ser Asp Thr Thr Gly
            85   90   95

Lys Leu Gly Phe Glu Glu Phe Lys Tyr Leu Trp Asn Asn Ile Lys Arg
            100   105   110

Trp Gln Ala Ile Tyr Lys Gln Phe Asp Thr Asp Arg Ser Gly Thr Ile
        115   120   125

Cys Ser Ser Glu Leu Pro Gly Ala Phe Glu Ala Ala Gly Phe His Leu
    130   135   140

Asn Glu His Leu Tyr Asn Met Ile Ile Arg Arg Tyr Ser Asp Glu Ser
145   150   155   160

Gly Asn Met Asp Phe Asp Asn Phe Ile Ser Cys Leu Val Arg Leu Asp
            165   170   175

Ala Met Phe Arg Ala Phe Lys Ser Leu Asp Lys Asp Gly Thr Gly Gln
            180   185   190

Ile Gln Val Asn Ile Gln Glu Trp Leu Gln Leu Thr Met Tyr Ser
            195   200   205

<210> 1002
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1002
Ile Phe Cys Asp Thr Arg Ser His Gln Val Ala Xaa Gly Trp Phe Arg
 1   5   10   15

Ile Pro Gly Leu Lys
            20

<210> 1003
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1003

```
Met Pro Gln Leu Gly Leu Ser Cys Ile Pro Val Glu Gly Pro Xaa Pro
 1               5                  10                  15

Cys Leu Xaa Glu Val Arg Leu Cys Cys Val Asn Gly Gln Ala Leu Pro
            20                  25                  30

Gln Pro Thr Pro Gly Lys Val His Leu Phe Ser Gly Leu Tyr Lys Val
        35              40                  45

Ser Trp Gly Pro Val Ala Ser Leu Pro Val Arg Ser Asp Phe Ser Leu
    50              55                  60

Ser Ser Ser Pro Val Gly Glu Thr Lys Pro Asp Trp Gly Ala Gln Gly
65              70                  75                  80

Glu His Gly Lys Gly Arg Leu Pro Cys Leu Ser Leu Ala Val Arg Val
            85                  90                  95

Arg Val Thr His Thr Lys Xaa Glu Cys Gly Gln Gln Val
            100             105
```

<210> 1004
<211> 542
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (252)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (519)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1004

```
Lys Asp Pro Glu Glu Tyr Cys Cys Thr Pro Ala Ala Arg Gly Arg Gly
 1               5                  10                  15

Lys Ser Ala Ala Leu Gly Leu Ala Ile Ala Gly Ala Val Ala Phe Gly
            20                  25                  30

Tyr Ser Asn Ile Phe Val Thr Ser Pro Ser Pro Asp Asn Leu His Thr
            35                  40                  45

Leu Phe Glu Phe Val Phe Lys Gly Phe Asp Ala Leu Gln Tyr Gln Glu
    50                  55                  60
```

```
His Leu Asp Tyr Glu Ile Ile Gln Ser Leu Asn Pro Glu Phe Asn Lys
65              70              75                      80

Ala Val Ile Arg Val Asn Val Phe Arg Glu His Arg Gln Thr Ile Gln
                85              90                      95

Tyr Ile His Pro Ala Asp Ala Val Lys Leu Gly Gln Ala Glu Leu Val
            100             105             110

Val Ile Asp Glu Ala Ala Ala Ile Pro Leu Pro Leu Val Lys Ser Leu
        115             120             125

Leu Gly Pro Tyr Leu Val Phe Met Ala Ser Thr Ile Asn Gly Tyr Glu
    130             135             140

Gly Thr Gly Arg Ser Leu Ser Leu Lys Leu Ile Gln Gln Leu Arg Gln
145             150             155             160

Gln Ser Ala Gln Ser Gln Val Ser Thr Thr Ala Glu Asn Lys Thr Thr
            165             170             175

Thr Thr Ala Arg Leu Ala Ser Ala Arg Thr Leu His Glu Val Ser Leu
            180             185             190

Gln Glu Ser Ile Arg Tyr Ala Pro Gly Asp Ala Val Glu Lys Trp Leu
        195             200             205

Asn Asp Leu Leu Cys Leu Asp Cys Leu Asn Ile Thr Arg Ile Val Ser
    210             215             220

Gly Cys Pro Leu Pro Glu Ala Cys Glu Leu Tyr Tyr Val Asn Arg Asp
225             230             235             240

Thr Leu Phe Cys Tyr His Lys Ala Ser Glu Val Xaa Leu Gln Arg Leu
            245             250             255

Met Ala Leu Tyr Val Ala Ser His Tyr Lys Asn Ser Pro Asn Asp Leu
            260             265             270

Gln Met Leu Ser Asp Ala Pro Ala His His Leu Phe Cys Leu Leu Pro
    275             280             285

Pro Val Pro Pro Thr Gln Asn Ala Leu Pro Glu Val Leu Ala Val Ile
    290             295             300

Gln Val Cys Leu Glu Gly Glu Ile Ser Arg Gln Ser Ile Leu Asn Ser
305             310             315             320

Leu Ser Arg Gly Lys Lys Ala Ser Gly Asp Leu Ile Pro Trp Thr Val
            325             330             335
```

972

Ser Glu Gln Phe Gln Asp Pro Asp Phe Gly Gly Leu Ser Gly Gly Arg
            340   345   350

Val Val Arg Ile Ala Val His Pro Asp Tyr Gln Gly Met Gly Tyr Gly
            355   360   365

Ser Arg Ala Leu Gln Leu Leu Gln Met Tyr Tyr Glu Gly Arg Phe Pro
    370   375   380

Cys Leu Glu Glu Lys Val Leu Glu Thr Pro Gln Glu Ile His Thr Val
385   390   395   400

Ser Ser Glu Ala Val Ser Leu Leu Glu Glu Val Ile Thr Pro Arg Lys
            405   410   415

Asp Leu Pro Pro Leu Leu Leu Lys Leu Asn Glu Arg Pro Ala Glu Arg
            420   425   430

Leu Asp Tyr Leu Gly Val Ser Tyr Gly Leu Thr Pro Arg Leu Leu Lys
            435   440   445

Phe Trp Lys Arg Ala Gly Phe Val Pro Val Tyr Leu Arg Gln Thr Pro
    450   455   460

Asn Asp Leu Thr Gly Glu His Ser Cys Ile Met Leu Lys Thr Leu Thr
465   470   475   480

Asp Glu Asp Glu Ala Asp Gln Gly Gly Trp Leu Ala Ala Phe Trp Lys
            485   490   495

Asp Phe Arg Arg Arg Phe Leu Ala Leu Leu Ser Tyr Gln Phe Ser Thr
            500   505   510

Phe Ser Pro Ser Leu Ala Xaa Asn Ile Ile Gln Asn Arg Asn Met Gly
    515   520   525

Lys Pro Ala Gln Pro Ala Leu Ser Arg Glu Glu Leu Glu Ala
    530   535   540

<210> 1005
<211> 202
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1005
Asp Ala Ala Asp Thr Ile Glu Thr Asp Thr Ala Thr Ala Asp Thr Thr
 1               5               10              15

Val Ala Asn Asn Val Pro Pro Ala Ala Thr Ser Leu Ile Asp Leu Trp
            20              25              30

Pro Gly Asn Gly Glu Gly Ala Ser Thr Leu Gln Gly Glu Pro Arg Ala
        35              40              45

Pro Thr Pro Pro Ser Gly Thr Glu Val Thr Leu Ala Glu Val Pro Leu
    50              55              60

Leu Asp Glu Val Ala Pro Glu Pro Leu Leu Pro Ala Xaa Glu Gly Cys
65              70              75              80

Ala Thr Leu Leu Asn Phe Asp Glu Leu Pro Glu Pro Pro Ala Thr Phe
            85              90              95

Cys Asp Pro Glu Glu Val Glu Gly Glu Pro Leu Ala Ala Pro Gln Thr
        100             105             110

Pro Thr Leu Pro Ser Ala Leu Glu Glu Leu Glu Gln Glu Gln Glu Pro
    115             120             125

Glu Pro His Leu Leu Thr Asn Gly Glu Thr Thr Gln Lys Glu Gly Thr
    130             135             140

Gln Ala Ser Glu Gly Tyr Phe Ser Gln Ser Gln Glu Glu Glu Phe Ala
145             150             155             160

Gln Ser Glu Glu Leu Cys Ala Lys Ala Pro Pro Pro Val Phe Tyr Asn
            165             170             175

Lys Pro Pro Glu Ile Asp Ile Thr Cys Trp Asp Ala Asp Pro Val Pro
        180             185             190

Glu Glu Glu Glu Gly Phe Glu Gly Gly Asp
        195             200
```

```
<400> 1006
Ser Ala Met Arg Lys Phe Ala Tyr Cys Lys Val Val Leu Ala Thr Ser
 1               5               10              15
```

Leu Ile Trp Val Leu Leu Asp Met Phe Leu Leu Leu Tyr Phe Ser Glu
        20   25   30

Cys Asn Lys Cys Asp Glu Lys Lys Glu Arg Gly Leu Pro Ala Gly Asp
        35   40   45

Val Leu Glu Pro Val Gln Lys Pro His Glu Gly Pro Gly Glu Met Gly
    50   55   60

Lys Pro Val Val Ile Pro Lys Glu Asp Gln Glu Lys Met Lys Glu Met
65   70   75   80

Phe Lys Ile Asn Gln Phe Asn Leu Met Ala Ser Glu Met Ile Ala Leu
                85   90   95

Asn Arg Ser Leu Pro Asp Val Arg Leu Glu Gly Cys Lys Thr Lys Val
            100   105   110

Tyr Pro Asp Asn Leu Pro Thr Thr Ser Val Val Ile Val Phe His Asn
        115   120   125

Glu Ala Trp Ser Thr Leu Leu Arg Thr Val His Ser Val Ile Asn Arg
    130   135   140

Ser Pro Arg His Met Ile Glu Glu Ile Val Leu Val Asp Asp Ala Ser
145   150   155   160

Glu Arg Asp Phe Leu Lys Arg Pro Leu Glu Ser Tyr Val Lys Lys Leu
            165   170   175

Lys Val Pro Val His Val Ile Arg Met Glu Gln Arg Ser Gly Leu Ile
            180   185   190

Arg Ala Arg Leu Lys Gly Ala Ala Val Ser Lys Gly Gln Val Ile Thr
        195   200   205

Phe Leu Asp Ala His Cys Glu Cys Thr Val Gly Trp Leu Glu Pro Leu
    210   215   220

Leu Ala Arg Ile Lys His Asp Arg Arg Thr Val Val Cys Pro Ile Ile
225   230   235   240

Asp Val Ile Ser Asp Asp Thr Phe Glu Tyr Met Ala Gly Ser Asp Met
            245   250   255

Thr Tyr Gly Gly Phe Asn Trp Lys Leu Asn Phe Arg Trp Tyr Pro Val
            260   265   270

Pro Gln Arg Glu Met Asp Arg Arg Lys Gly Asp Arg Thr Leu Pro Val
        275   280   285

```
Arg Thr Pro Thr Met Ala Gly Gly Leu Phe Ser Ile Asp Arg Asp Tyr
    290             295             300

Phe Gln Glu Ile Gly Thr Tyr Asp Ala Gly Met Asp Ile Trp Gly Gly
305             310             315             320

Glu Asn Leu Glu Ile Ser Phe Arg Ile Trp Gln Cys Gly Gly Thr Leu
            325             330             335

Glu Ile Val Thr Cys Ser His Val Gly His Val Phe Arg Lys Ala Thr
            340             345             350

Pro Tyr Thr Phe Pro Gly Gly Thr Gly Gln Ile Ile Asn Lys Asn Asn
            355             360             365

Arg Arg Leu Ala Glu Val Trp Met Asp Glu Phe Lys Asn Phe Phe Tyr
    370             375             380

Ile Ile Ser Pro Gly Val Thr Lys Val Asp Tyr Gly Asp Ile Ser Ser
385             390             395             400

Arg Val Gly Leu Arg His Lys Leu Gln Cys Lys Pro Phe Ser Trp Tyr
            405             410             415

Leu Glu Asn Ile Tyr Pro Asp Ser Gln Ile Pro Arg His Tyr Phe Ser
            420             425             430

Leu Gly Glu Ile Arg Asn Val Glu Thr Asn Gln Cys Leu Asp Asn Met
            435             440             445

Ala Arg Lys Glu Asn Glu Lys Val Gly Ile Phe Asn Cys His Gly Met
    450             455             460

Gly Gly Asn Gln Val Phe Ser Tyr Thr Ala Asn Lys Glu Ile Arg Thr
465             470             475             480

Asp Asp Leu Cys Leu Asp Val Ser Lys Leu Asn Gly Pro Val Thr Met
            485             490             495

Leu Lys Cys His His Leu Lys Gly Asn Gln Leu Trp Glu Tyr Asp Pro
            500             505             510

Val Lys Leu Thr Leu Gln His Val Asn Ser Asn Gln Cys Leu Asp Lys
            515             520             525

Ala Thr Glu Glu Asp Ser Gln Val Pro Ser Ile Arg Asp Cys Asn Gly
    530             535             540

Ser Arg Ser Gln Gln Trp Leu Leu Arg Asn Val Thr Leu Pro Glu Ile
545             550             555             560
```

Phe

<210> 1007
<211> 189
<212> PRT
<213> Homo sapiens

<400> 1007
Phe Ile Pro Ile Gly Glu Asn Ser Ala Thr Gly Glu Asn Arg Leu Ala
 1   5   10   15

Ser Ala Leu Trp Ile Gly Asp Arg Ser Tyr Pro Gly Leu Ser Glu Gly
            20   25   30

Asn Ser Arg Pro Pro Ile Pro Gly Pro Pro Tyr Val Ala Ser Pro Asp
        35   40   45

Leu Trp Ser His Trp Glu Asp Ser Ala Leu Pro Pro Pro Ser Leu Arg
    50   55   60

Pro Val Gln Pro Thr Trp Glu Gly Ser Ser Glu Ala Gly Leu Asp Trp
65   70   75   80

Ala Gly Ala Ser Phe Ser Pro Gly Thr Pro Met Trp Ala Ala Leu Asp
                85   90   95

Glu Gln Met Leu Gln Glu Gly Ile Gln Ala Ser Leu Leu Asp Gly Pro
            100   105   110

Ala Gln Glu Pro Gln Ser Ala Pro Trp Leu Ser Lys Ser Ser Val Ser
        115   120   125

Ser Leu Arg Leu Gln Gln Leu Glu Arg Met Gly Phe Pro Thr Glu Gln
    130   135   140

Ala Val Val Ala Leu Ala Ala Thr Gly Arg Val Glu Gly Ala Val Ser
145   150   155   160

Leu Leu Val Gly Gly Gln Val Gly Thr Glu Thr Leu Val Thr His Gly
            165   170   175

Lys Gly Gly Pro Ala His Ser Glu Gly Pro Gly Pro Pro
            180   185

<210> 1008
<211> 300

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1008
Arg Gln Lys Ser Ser Xaa Leu Trp Pro His Pro Leu Xaa Arg His Arg
 1               5               10              15

Ala Gly Pro Gly Leu Ala Gly Asn Gly Gly Ile Leu Pro Asn Leu Gly
            20              25              30

Asp Gly Gly Gly Gly Trp Xaa Trp Trp Glu Gly Asn His Val Leu Leu
         35              40              45

Asn Leu Phe Leu Val Pro Pro Ile Pro Arg Pro Thr Arg His His Thr
     50              55              60

Ala Asp Asn Thr His Pro Leu Ala Gln Ala Ser Ile His Met Cys Cys
 65              70              75              80

Thr Phe Ser Ser Arg His Ala Asp Asn Pro Thr Arg Pro His His His
             85              90              95

Met Pro Lys Cys Thr His Thr Glu Pro His Arg Pro Ser Gly Pro Ala
            100             105             110

Gly Ser Ser Leu Gly Phe Pro Leu Ala His Phe Gln Gly Pro Gly Ala
            115             120             125

Ala Thr Lys Cys Glu Ser Ser Val Ala Ala Pro Ser Phe Ser Pro Ser
     130             135             140

Thr Ser Ile Gly Pro Ile Gly Lys His Arg Gly Leu Thr Leu Phe His
145             150             155             160

Ile Pro Cys Pro Ala Leu Lys Trp Thr Ile Thr Phe Trp Asp Arg Leu
            165             170             175
```

```
Lys Phe Leu Lys Ser Leu His His Ser Val Pro Ser Lys Gly Ser Pro
            180             185             190

Cys Gln Trp Gly Phe Glu Arg Glu Phe Leu Glu Pro Thr Phe Lys Phe
            195             200             205

Cys Leu Ile Trp Arg Glu Thr Lys Ile Gly Arg Gly Lys Arg Thr Pro
    210             215             220

Asp Val Leu Leu Leu Pro Glu Ile Leu Glu Thr Asp Ser Leu Asp Trp
225             230             235             240

Lys Met Asp Lys Ser Ala Leu Thr Trp Arg Val Gly Thr Arg Trp Gly
            245             250             255

Pro Ala Leu Pro Thr Ala Ala Val Ala Ser Ser Leu Ala Gly Phe Ala
            260             265             270

Gly Arg Gln Gln Glu Gly Glu Gly Gly Ser Thr Ala Arg Gly Thr Gly
            275             280             285

Gly Ala Ala Gly Leu Gln Glu Leu Phe Phe His Cys
    290             295             300
```

<210> 1009
<211> 344
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1009
```
Arg Pro Pro Cys Pro His Ser Arg Ser Xaa Trp Arg Ile Leu Ser Leu
 1               5               10              15

Thr Pro Asn Pro Asp Pro Leu Pro Asn Met Ser Val Phe Phe Phe Ile
            20              25              30

Phe Leu Asn Ile Phe Xaa Leu Ala Phe Ser Ser Pro Gly Ser Gln Pro
            35              40              45
```

```
Leu Leu Asn Ser Pro Pro Ser Phe Val Cys Trp Ser Arg Gly Phe Met
    50                  55              60

Glu Met Asn Gly Arg Gly Glu Leu Val Glu Ser Leu Lys Arg Phe Cys
65              70              75                      80

Ala Ser Thr Arg Leu Pro Pro Thr Pro Leu Leu Leu Phe Pro Glu Glu
            85              90                      95

Glu Ala Thr Asn Gly Arg Glu Gly Leu Leu Arg Phe Ser Ser Trp Pro
            100             105             110

Phe Ser Ile Gln Asp Val Val Gln Pro Leu Thr Leu Gln Val Gln Arg
            115             120             125

Pro Leu Val Ser Val Thr Val Ser Asp Ala Ser Trp Val Ser Glu Leu
    130             135             140

Leu Trp Ser Leu Phe Val Pro Phe Thr Val Tyr Gln Val Arg Trp Leu
145             150             155             160

Arg Pro Val His Arg Gln Leu Gly Glu Ala Asn Glu Glu Phe Ala Leu
            165             170             175

Arg Val Gln Gln Leu Val Ala Lys Glu Leu Gly Gln Thr Gly Thr Arg
            180             185             190

Leu Thr Pro Ala Asp Lys Ala Glu His Met Lys Arg Gln Arg His Pro
    195             200             205

Arg Leu Arg Pro Gln Ser Ala Gln Ser Ser Phe Pro Pro Ser Pro Gly
    210             215             220

Pro Ser Pro Asp Val Gln Leu Ala Thr Leu Ala Gln Arg Val Lys Glu
225             230             235             240

Val Leu Pro His Val Pro Leu Gly Val Ile Gln Arg Asp Leu Ala Lys
            245             250             255

Thr Gly Cys Val Asp Leu Thr Ile Thr Asn Leu Leu Glu Gly Ala Val
            260             265             270

Ala Phe Met Pro Glu Asp Ile Thr Lys Gly Thr Gln Ser Leu Pro Thr
            275             280             285

Ala Ser Ala Ser Lys Phe Pro Ser Ser Gly Pro Val Thr Pro Gln Pro
    290             295             300

Thr Ala Leu Thr Phe Ala Lys Ser Ser Trp Ala Arg Gln Glu Ser Leu
305             310             315             320
```

```
Gln Glu Arg Lys Gln Ala Leu Tyr Glu Tyr Ala Arg Arg Arg Phe Thr
            325             330             335

Glu Arg Arg Ala Gln Glu Ala Asp
            340
```

```
<210> 1010
<211> 233
<212> PRT
<213> Homo sapiens

<400> 1010
Pro His Cys Glu Pro Asn Pro Gly Ala Gly Ala Met Val Leu Leu His
 1               5               10              15

Val Leu Phe Glu His Ala Val Gly Tyr Ala Leu Leu Ala Leu Lys Glu
            20              25              30

Val Glu Glu Ile Ser Leu Leu Gln Pro Gln Val Glu Glu Ser Val Leu
            35              40              45

Asn Leu Gly Lys Phe His Ser Ile Val Arg Leu Val Ala Phe Cys Pro
     50              55              60

Phe Ala Ser Ser Gln Val Ala Leu Glu Asn Ala Asn Ala Val Ser Glu
 65              70              75              80

Gly Val Val His Glu Asp Leu Arg Leu Leu Leu Glu Thr His Leu Pro
            85              90              95

Ser Lys Lys Lys Lys Val Leu Leu Gly Val Gly Asp Pro Lys Ile Gly
            100             105             110

Ala Ala Ile Gln Glu Glu Leu Gly Tyr Asn Cys Gln Thr Gly Gly Val
            115             120             125

Ile Ala Glu Ile Leu Arg Gly Val Arg Leu His Phe His Asn Leu Val
     130             135             140

Lys Gly Leu Thr Asp Leu Ser Ala Cys Lys Ala Gln Leu Gly Leu Gly
145             150             155             160

His Ser Tyr Ser Arg Ala Lys Val Lys Phe Asn Val Asn Arg Val Asp
            165             170             175

Asn Met Ile Ile Gln Ser Ile Ser Leu Leu Asp Gln Leu Asp Lys Asp
            180             185             190
```

Ile Asn Thr Phe Ser Met Arg Val Arg Glu Trp Tyr Gly Tyr His Phe
        195   200   205

Pro Glu Leu Val Lys Ile Ile Asn Asp Asn Ala Thr Tyr Cys Arg Leu
        210   215   220

Ala Gln Phe Ile Gly Asn Arg Arg Asn
225   230

<210> 1011
<211> 187
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1011
Gly Thr Ser Xaa Phe Ser Phe Pro Leu Gly Arg Glu Glu Ala Met Ala
  1   5   10   15

Ala Met Ala Ser Leu Gly Ala Leu Ala Leu Leu Leu Leu Ser Ser Leu
            20   25   30

Ser Arg Cys Ser Ala Glu Ala Cys Leu Glu Pro Gln Ile Thr Pro Ser
        35   40   45

Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu Thr Val Phe Ile
        50   55   60

Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val Gln Asn Met Ala Leu
65   70   75   80

Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr Arg Gly Gln Asp
            85   90   95

Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp His Lys Ser Ala His
            100   105   110

Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu Ser Tyr Ser Leu
        115   120   125

Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser Ile Ile Pro Pro
        130   135   140

Leu Phe Thr Val Ser Val Asp His Arg Gly Thr Trp Asn Gly Pro Trp
145   150   155   160

```
Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly Leu Val Ile Tyr Tyr
            165                 170                 175

Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala
            180                 185
```

<210> 1012
<211> 708
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (433)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1012

```
Ala Leu Arg Pro Ile Ser Ser Val Arg Ala Gly Asp Arg Cys Gln Arg
 1               5                 10                  15

Ser Xaa Ala Ala Asp Met Ala Ala Ser Thr Ala Ala Gly Lys Gln Arg
            20                 25                  30

Ile Pro Lys Val Ala Lys Val Lys Asn Lys Ala Pro Ala Glu Val Gln
         35                 40                  45

Ile Thr Ala Glu Gln Leu Leu Arg Glu Ala Lys Glu Arg Glu Leu Glu
    50                 55                  60

Leu Leu Pro Pro Pro Pro Gln Gln Lys Ile Thr Asp Glu Glu Glu Leu
65                 70                  75                  80

Asn Asp Tyr Lys Leu Arg Lys Arg Lys Thr Phe Glu Asp Asn Ile Arg
```

                            85   90   95

        Lys Asn Arg Thr Val Ile Ser Asn Trp Ile Lys Tyr Ala Gln Trp Glu
                    100   105   110

        Glu Ser Leu Lys Glu Ile Gln Arg Ala Arg Ser Ile Tyr Glu Arg Ala
                    115   120   125

        Leu Asp Val Asp Tyr Arg Asn Ile Thr Leu Trp Leu Lys Tyr Ala Glu
                    130   135   140

        Met Glu Met Lys Asn Arg Gln Val Xaa His Ala Arg Asn Ile Trp Asp
        145   150   155   160

        Arg Ala Ile Thr Thr Leu Pro Arg Val Asn Gln Phe Trp Tyr Lys Tyr
                    165   170   175

        Thr Tyr Met Glu Glu Met Leu Gly Asn Val Ala Gly Ala Arg Gln Val
                    180   185   190

        Phe Glu Arg Trp Met Glu Trp Gln Pro Glu Glu Gln Ala Trp His Ser
                    195   200   205

        Tyr Ile Asn Phe Glu Leu Arg Tyr Lys Glu Val Asp Arg Ala Arg Thr
                    210   215   220

        Ile Tyr Glu Arg Xaa Val Leu Val His Pro Asp Val Lys Asn Trp Ile
        225   230   235   240

        Lys Tyr Ala Arg Phe Glu Glu Lys His Ala Tyr Phe Ala His Ala Arg
                    245   250   255

        Lys Val Tyr Glu Arg Ala Val Glu Phe Phe Gly Asp Glu His Met Asp
                    260   265   270

        Glu His Leu Tyr Val Ala Phe Ala Lys Phe Glu Glu Asn Gln Lys Glu
                    275   280   285

        Phe Glu Arg Val Arg Val Ile Tyr Lys Tyr Ala Leu Asp Arg Ile Ser
                    290   295   300

        Lys Gln Asp Ala Gln Glu Leu Phe Lys Asn Tyr Thr Ile Phe Glu Lys
        305   310   315   320

        Lys Phe Gly Asp Arg Arg Gly Ile Glu Asp Ile Ile Val Ser Lys Arg
                    325   330   335

        Arg Phe Gln Tyr Glu Glu Glu Val Lys Ala Asn Pro His Asn Tyr Asp
                    340   345   350

        Ala Trp Phe Asp Tyr Leu Arg Leu Val Glu Ser Asp Ala Glu Ala Glu

984

```
          355                    360                    365

Ala Val Arg Glu Val Tyr Glu Arg Ala Ile Ala Asn Val Pro Pro Ile
    370                375                380

Gln Glu Lys Arg His Trp Lys Arg Tyr Ile Tyr Leu Trp Ile Asn Tyr
385                390                395                400

Ala Leu Tyr Glu Glu Leu Glu Ala Lys Asp Pro Glu Arg Thr Arg Gln
            405                410                415

Val Tyr Gln Ala Ser Leu Glu Leu Ile Pro His Lys Lys Phe Thr Phe
            420                425                430

Xaa Lys Met Trp Ile Leu Tyr Ala Gln Phe Glu Ile Arg Gln Lys Asn
            435                440                445

Leu Ser Leu Ala Arg Arg Ala Leu Gly Thr Ser Ile Gly Lys Cys Pro
    450                455                460

Lys Asn Lys Leu Phe Lys Val Tyr Ile Glu Leu Glu Leu Gln Leu Arg
465                470                475                480

Glu Phe Asp Arg Cys Arg Lys Leu Tyr Glu Lys Phe Leu Glu Phe Gly
            485                490                495

Pro Glu Asn Cys Thr Ser Trp Ile Lys Phe Ala Glu Leu Glu Thr Ile
            500                505                510

Leu Gly Asp Ile Asp Arg Ala Arg Ala Ile Tyr Glu Leu Ala Ile Ser
            515                520                525

Gln Pro Arg Leu Asp Met Pro Glu Val Leu Trp Lys Ser Tyr Ile Asp
    530                535                540

Phe Glu Ile Glu Gln Glu Glu Thr Glu Arg Thr Arg Asn Leu Tyr Arg
545                550                555                560

Arg Leu Leu Gln Arg Thr Gln His Val Lys Val Trp Ile Ser Phe Ala
            565                570                575

Gln Phe Glu Leu Ser Ser Gly Lys Glu Gly Ser Leu Thr Lys Cys Arg
            580                585                590

Gln Ile Tyr Glu Glu Ala Asn Lys Thr Met Arg Asn Cys Glu Glu Lys
            595                600                605

Glu Glu Arg Leu Met Leu Leu Glu Ser Trp Arg Ser Phe Glu Glu Glu
    610                615                620

Phe Gly Thr Ala Ser Asp Lys Glu Arg Val Asp Lys Leu Met Pro Glu
```

```
         625                   630                   635                   640
Lys Val Lys Lys Arg Arg Lys Val Gln Thr Asp Asp Gly Ser Asp Ala
            645                   650                   655

Gly Trp Glu Glu Tyr Phe Asp Tyr Ile Phe Pro Glu Asp Ala Ala Asn
            660                   665                   670

Gln Pro Asn Leu Lys Leu Leu Ala Met Ala Lys Leu Trp Lys Lys Gln
            675                   680                   685

Gln Gln Glu Lys Glu Asp Ala Glu His His Pro Asp Glu Asp Val Asp
         690                   695                   700

Glu Ser Glu Ser
705
```

```
<210> 1013
<211> 183
<212> PRT
<213> Homo sapiens

<400> 1013
Leu Pro Pro Gln Val Ala Asp Thr Met Leu Pro Pro Met Ala Leu Pro
  1               5                  10                  15

Ser Val Ser Trp Met Leu Leu Ser Cys Leu Met Leu Leu Ser Gln Val
            20                  25                  30

Gln Gly Glu Glu Pro Gln Arg Glu Leu Pro Ser Ala Arg Ile Arg Cys
            35                  40                  45

Pro Lys Gly Ser Lys Ala Tyr Gly Ser His Cys Tyr Ala Leu Phe Leu
         50                  55                  60

Ser Pro Lys Ser Trp Thr Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro
 65                  70                  75                  80

Ser Gly Asn Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val
            85                  90                  95

Ser Ser Leu Val Lys Ser Ile Gly Asn Ser Tyr Ser Tyr Val Trp Ile
            100                 105                 110

Gly Leu His Asp Pro Thr Gln Gly Thr Glu Pro Asn Gly Glu Gly Trp
            115                 120                 125

Glu Trp Ser Ser Ser Asp Val Met Asn Tyr Phe Ala Trp Glu Arg Asn
         130                 135                 140
```

Pro Ser Thr Ile Ser Ser Pro Gly His Cys Ala Ser Leu Ser Arg Ser
145   150   155   160

Thr Ala Phe Leu Arg Trp Lys Asp Tyr Asn Cys Asn Val Arg Leu Pro
                165   170   175

Tyr Val Cys Lys Phe Thr Asp
        180

<210> 1014
<211> 213
<212> PRT
<213> Homo sapiens

<400> 1014
Val Thr Asp Gly Gly Ser Ala Arg Lys Pro Lys Met Ala Val Pro Ala
 1   5   10   15

Ala Leu Ile Leu Arg Glu Ser Pro Ser Met Lys Lys Ala Val Ser Leu
            20   25   30

Ile Asn Ala Ile Asp Thr Gly Arg Phe Pro Arg Leu Leu Thr Arg Ile
        35   40   45

Leu Gln Lys Leu His Leu Lys Ala Glu Ser Ser Phe Ser Glu Glu Glu
    50   55   60

Glu Glu Lys Leu Gln Ala Ala Phe Ser Leu Glu Lys Gln Asp Leu His
 65   70   75   80

Leu Val Leu Glu Thr Ile Ser Phe Ile Leu Glu Gln Ala Val Tyr His
            85   90   95

Asn Val Lys Pro Ala Ala Leu Gln Gln Gln Leu Glu Asn Ile His Leu
            100   105   110

Arg Gln Asp Lys Ala Glu Ala Phe Val Asn Thr Trp Ser Ser Met Gly
        115   120   125

Gln Glu Thr Val Glu Lys Phe Arg Gln Arg Ile Leu Ala Pro Cys Lys
    130   135   140

Leu Glu Thr Val Gly Trp Gln Leu Asn Leu Gln Met Ala His Ser Ala
145   150   155   160

Gln Ala Lys Leu Lys Ser Pro Gln Ala Val Leu Gln Leu Gly Val Asn
            165   170   175

```
Asn Glu Asp Ser Lys Ser Leu Glu Lys Val Leu Val Glu Phe Ser His
            180               185               190

Lys Glu Leu Phe Asp Phe Tyr Asn Lys Leu Glu Thr Ile Gln Ala Gln
            195               200               205

Leu Asp Ser Leu Thr
            210
```

```
<210> 1015
<211> 544
<212> PRT
<213> Homo sapiens

<400> 1015
Ala Pro Gly Thr Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr
  1           5               10                15

Ile Pro Tyr His Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala
            20               25               30

Ser Gly Thr Val Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val
            35               40               45

Ala Val Lys His Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg
      50               55               60

Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe Ser
 65               70               75               80

Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe Leu Gly
            85               90               95

Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His
            100              105              110

Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile
            115              120              125

Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro
            130              135              140

Pro Leu Leu His His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn
145              150              155              160

Glu Phe His Val Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met
            165              170              175

Met Ser Leu Ser Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly
```

```
              180                    185                    190

    Thr Ile Ile Tyr Met Pro Pro Glu Asn Tyr Glu Pro Gly Gln Lys Ser
            195                    200                    205

    Arg Ala Ser Ile Lys His Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp
    210                    215                    220

    Glu Val Leu Ser Arg Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu
    225                    230                    235                    240

    Gln Ile Met Tyr Ser Val Ser Gln Gly His Arg Pro Val Ile Asn Glu
                    245                    250                    255

    Glu Ser Leu Pro Tyr Asp Ile Pro His Arg Ala Arg Met Ile Ser Leu
                    260                    265                    270

    Ile Glu Ser Gly Trp Ala Gln Asn Pro Asp Glu Arg Pro Ser Phe Leu
                275                    280                    285

    Lys Cys Leu Ile Glu Leu Glu Pro Val Leu Arg Thr Phe Glu Glu Ile
        290                    295                    300

    Thr Phe Leu Glu Ala Val Ile Gln Leu Lys Lys Thr Lys Leu Gln Ser
    305                    310                    315                    320

    Val Ser Ser Ala Ile His Leu Cys Asp Lys Lys Lys Met Glu Leu Ser
                    325                    330                    335

    Leu Asn Ile Pro Val Asn His Gly Pro Gln Glu Glu Ser Cys Gly Ser
                340                    345                    350

    Ser Gln Leu His Glu Asn Ser Gly Ser Pro Glu Thr Ser Arg Ser Leu
            355                    360                    365

    Pro Ala Pro Gln Asp Asn Asp Phe Leu Ser Arg Lys Ala Gln Asp Cys
        370                    375                    380

    Tyr Phe Met Lys Leu His His Cys Pro Gly Asn His Ser Trp Asp Ser
    385                    390                    395                    400

    Thr Ile Ser Gly Ser Gln Arg Ala Ala Phe Cys Asp His Lys Thr Thr
                405                    410                    415

    Pro Cys Ser Ser Ala Ile Ile Asn Pro Leu Ser Thr Ala Gly Asn Ser
                420                    425                    430

    Glu Arg Leu Gln Pro Gly Ile Ala Gln Gln Trp Ile Gln Ser Lys Arg
            435                    440                    445

    Glu Asp Ile Val Asn Gln Met Thr Glu Ala Cys Leu Asn Gln Ser Leu
```

```
        450               455               460

Asp Ala Leu Leu Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu
465               470               475               480

Val Ser Thr Lys Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp
                485               490               495

Thr Thr Asp Ile Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys
                500               505               510

Leu Lys Asp Asn Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu
                515               520               525

Val Val Ser Arg Ser Pro Ser Leu Asn Leu Leu Gln Asn Lys Ser Met
    530               535               540
```

<210> 1016
<211> 257
<212> PRT
<213> Homo sapiens

<400> 1016

```
His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile
  1               5               10                15

Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu
                20               25               30

Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg
        35               40               45

Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu
    50               55               60

Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu
65               70               75               80

Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His
                85               90               95

Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu
            100               105               110

Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Gly Phe Gly Leu Thr
        115               120               125
```

```
Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser
    130             135             140

Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val
145             150             155             160

Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu
                165             170             175

Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu
            180             185             190

Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu
        195             200             205

Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys
    210             215             220

Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser
225             230             235             240

Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro
            245             250             255

Gln
```

```
<210> 1017
<211> 248
<212> PRT
<213> Homo sapiens

<400> 1017
Ala Ser Asp Arg Arg Gly Tyr Ser Ser Arg Ile Val Gly Gly Asn Met
1               5               10              15

Ser Leu Leu Ser Gln Trp Pro Trp Gln Ala Ser Leu Gln Phe Gln Gly
            20              25              30

Tyr His Leu Cys Gly Gly Ser Val Ile Thr Pro Leu Trp Ile Ile Thr
        35              40              45

Ala Ala His Cys Val Tyr Asp Leu Tyr Leu Pro Lys Ser Trp Thr Ile
    50              55              60

Gln Val Gly Leu Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu
65              70              75              80
```

```
Val Glu Lys Ile Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly
             85                  90              95

Asn Asp Ile Ala Leu Met Lys Leu Ala Gly Pro Leu Thr Phe Asn Glu
            100             105              110

Met Ile Gln Pro Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp
            115             120              125

Gly Lys Val Cys Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Ala
    130             135              140

Gly Asp Ala Ser Pro Val Leu Asn His Ala Ala Val Pro Leu Ile Ser
145             150              155              160

Asn Lys Ile Cys Asn His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro
            165             170              175

Ser Met Leu Cys Ala Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln
            180             185              190

Gly Asp Ser Gly Gly Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys
        195             200             205

Leu Val Gly Ala Thr Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys
    210             215             220

Pro Gly Val Tyr Thr Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu
225             230             235             240

Gln Met Glu Arg Asp Leu Lys Thr
            245
```

```
<210> 1018
<211> 224
<212> PRT
<213> Homo sapiens

<400> 1018
Gly Arg Val Ser Ala Pro Val Pro Gly Lys Met Val Leu Gly Gly Cys
  1           5              10              15

Pro Val Ser Tyr Leu Leu Leu Cys Gly Gln Ala Ala Leu Leu Leu Gly
            20             25              30

Asn Leu Leu Leu Leu His Cys Val Ser Arg Ser His Ser Gln Asn Ala
        35             40              45

Thr Ala Glu Pro Glu Leu Thr Ser Ala Gly Ala Ala Gln Pro Glu Gly
```

```
       50                    55                    60

Pro Gly Gly Ala Ala Ser Trp Glu Tyr Gly Asp Pro His Ser Pro Val
65                    70                    75                    80

Ile Leu Cys Ser Tyr Leu Pro Asp Glu Phe Ile Glu Cys Glu Asp Pro
                 85                    90                    95

Val Asp His Val Gly Asn Ala Thr Ala Ser Gln Glu Leu Gly Tyr Gly
                100                   105                   110

Cys Leu Lys Phe Gly Gly Gln Ala Tyr Ser Asp Val Glu His Thr Ser
            115                   120                   125

Val Gln Cys His Ala Leu Asp Gly Ile Glu Cys Ala Ser Pro Arg Thr
    130                   135                   140

Phe Leu Arg Glu Asn Lys Pro Cys Ile Lys Tyr Thr Gly His Tyr Phe
145                   150                   155                   160

Ile Thr Thr Leu Leu Tyr Ser Phe Phe Leu Gly Cys Phe Gly Val Asp
                165                   170                   175

Arg Phe Cys Leu Gly His Thr Gly Thr Ala Val Gly Lys Leu Leu Thr
            180                   185                   190

Leu Gly Gly Leu Gly Ile Trp Trp Phe Val Asp Leu Ile Leu Leu Ile
            195                   200                   205

Thr Gly Gly Leu Met Pro Ser Asp Gly Ser Asn Trp Cys Thr Val Tyr
    210                   215                   220
```

<210> 1019
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1019

```
Asn Val Pro Val Cys His Leu Ser Thr Trp Lys Ile Leu Tyr Ile Trp
 1                    5                    10                    15

Lys Val Tyr Ala Ser Leu Asn Lys Tyr Met Leu Leu Asn Lys Pro Tyr
            20                    25                    30

His Ser Leu Arg Asn Cys Ile Tyr Phe Ile Ile Cys Pro Phe Arg Asn
        35                    40                    45
```

Gln Val Phe Cys Ile
    50

<210> 1020
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1020
Phe Tyr Thr Asn Leu Ile Trp Leu Pro Phe Val Pro Leu Ile Ser Gln
  1   5   10   15

Met Phe Lys Cys Ile Gly Phe Gly Phe Ser Met Tyr Lys Leu Pro Tyr
             20   25   30

Leu Leu Met Ser Ile Phe Cys Leu Phe Asn Phe Val Tyr Leu Leu Phe
             35   40   45

Cys Phe Trp Ile His Phe Leu Ile Arg Ser His Met Ile Asn Ile Ile
    50   55   60

Ser Ile Val Ile Ile Pro
 65   70

<210> 1021
<211> 337
<212> PRT
<213> Homo sapiens

<400> 1021
Arg Lys Arg Lys Gln Ala Ala Arg Ala Ala Glu Glu Pro Gly Ala Ala
  1   5   10   15

Met Asp Val Arg Ala Leu Pro Trp Leu Pro Trp Leu Leu Trp Leu Leu
             20   25   30

Cys Arg Gly Gly Gly Asp Ala Asp Ser Arg Ala Pro Phe Thr Pro Thr
             35   40   45

Trp Pro Arg Ser Arg Glu Arg Glu Ala Ala Ala Phe Arg Glu Ser Leu
    50   55   60

Asn Arg His Arg Tyr Leu Asn Ser Leu Phe Pro Ser Glu Asn Ser Thr
 65   70   75   80

Ala Phe Tyr Gly Ile Asn Gln Phe Ser Tyr Leu Phe Pro Glu Glu Phe

```
                        85                    90                      95

    Lys Ala Ile Tyr Leu Arg Ser Lys Pro Ser Lys Phe Pro Arg Tyr Ser
                100                     105             110

    Ala Glu Val His Met Ser Ile Pro Asn Val Ser Leu Pro Leu Arg Phe
                115                     120             125

    Asp Trp Arg Asp Lys Gln Val Val Thr Gln Val Arg Asn Gln Gln Met
        130             135                     140

    Cys Gly Gly Cys Trp Ala Phe Ser Val Val Gly Ala Val Glu Ser Ala
    145             150                     155                     160

    Tyr Ala Ile Lys Gly Lys Pro Leu Glu Asp Leu Ser Val Gln Gln Val
                165                     170                     175

    Ile Asp Cys Ser Tyr Asn Asn Tyr Gly Cys Asn Gly Gly Ser Thr Leu
                180                     185                     190

    Asn Ala Leu Asn Trp Leu Asn Lys Met Gln Val Lys Leu Val Lys Asp
                195                     200                     205

    Ser Glu Tyr Pro Phe Lys Ala Gln Asn Gly Leu Cys His Tyr Phe Ser
        210                     215                     220

    Gly Ser His Ser Gly Phe Ser Ile Lys Gly Tyr Ser Ala Tyr Asp Phe
    225                     230                     235                     240

    Ser Asp Gln Glu Asp Glu Met Ala Lys Ala Leu Leu Thr Phe Gly Pro
                245                     250                     255

    Leu Val Val Ile Val Asp Ala Val Ser Trp Gln Asp Tyr Leu Gly Gly
                260                     265                     270

    Ile Ile Gln His His Cys Ser Ser Gly Glu Ala Asn His Ala Val Leu
        275                     280                     285

    Ile Thr Gly Phe Asp Lys Thr Gly Ser Thr Pro Tyr Trp Ile Val Arg
        290                     295                     300

    Asn Ser Trp Gly Ser Ser Trp Gly Val Asp Gly Tyr Ala His Val Lys
    305                     310                     315                     320

    Met Gly Ser Asn Val Cys Gly Ile Ala Asp Ser Val Ser Ser Ile Phe
                325                     330                     335

    Val
```

<210> 1022
<211> 134
<212> PRT
<213> Homo sapiens

<400> 1022
Ala Ser Ala Glu Phe Glu Met Ala Gly Gly Lys Ala Gly Lys Asp Ser
 1   5   10   15

Gly Lys Ala Lys Thr Lys Ala Val Ser Arg Ser Gln Arg Ala Gly Leu
            20   25   30

Gln Phe Pro Val Gly Arg Ile His Arg His Leu Lys Ser Arg Thr Thr
        35   40   45

Ser His Gly Arg Val Gly Ala Thr Ala Ala Val Tyr Ser Ala Ala Ile
    50   55   60

Leu Glu Tyr Leu Thr Ala Glu Val Leu Glu Leu Ala Gly Asn Ala Ser
65   70   75   80

Lys Asp Leu Lys Val Lys Arg Ile Thr Pro Arg His Leu Gln Leu Ala
                85   90   95

Ile Arg Gly Asp Glu Glu Leu Asp Ser Leu Ile Lys Ala Thr Ile Ala
            100   105   110

Gly Gly Gly Val Ile Pro His Ile His Lys Ser Leu Ile Gly Lys Lys
            115   120   125

Gly Gln Gln Lys Thr Val
        130

<210> 1023
<211> 226
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1023
Gly Leu Phe Gln Thr Cys Ile His Leu Leu Thr Leu Pro Val Leu Val
 1   5   10   15

His Gly Glu Leu Phe Ala Pro Pro Arg Trp Leu Arg Arg Ala Ala Gly
            20   25   30

Xaa Pro Trp Thr Leu Val Thr Ser Cys Xaa Ser Leu Arg Pro Ser Gly
        35   40   45

Pro Cys Pro Arg Pro Gly Arg Ala Leu Leu Pro Ser Cys Ala Pro Ala
    50   55   60

Ala Arg Xaa Pro Trp Gly Gly Val Val Trp Cys Trp Glu Gly Val Leu
65   70   75   80

Gln Gly Glu Glu Asp Leu Glu Gly Leu Gly Ala Ala Val Leu Asn Arg
            85   90   95

Leu Thr Leu Arg Arg Pro Leu Ser Ala Ala Leu Leu Phe Ile Thr Val
        100   105   110

Pro His Ser Gly Arg Arg Ser Pro Val Ala Gly Gln Val Pro Met Ala
        115   120   125

Cys Ser Leu Glu Pro Asp Phe Arg Cys Phe Gly Ile Arg Ser Pro Gln
    130   135   140

His Arg Gln Val His Pro Ile Ile Thr Leu Pro Val Pro Gly Trp Ala
145   150   155   160

Gly Asp Ser Gly Thr Val Met Pro Gly Ala Arg Thr Ala Ala Leu Pro
            165   170   175

Leu His Thr Asp Gly Leu Gly Val Ala Leu Arg Pro His Pro Thr Leu
            180   185   190

Ile Ser Gly Arg Gly Ser Pro Glu Trp Ser Leu Val Arg Ala Val Ala
        195   200   205

Lys Pro Ala Val Ser Phe Leu His Lys Val Pro Pro Pro Leu Ser Val
    210   215   220

Ser Gly
225

<210> 1024
<211> 760
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (330)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1024
```
Gln Gly Lys Lys Arg Ala Gly Asn Phe Ala Ile Met Glu Ile Gln Cys
 1               5                  10                  15

Pro Ala Leu Arg Lys Thr Leu Pro Ile Leu Phe Gly Ser Leu Arg Arg
            20                  25                  30

Cys Leu Cys Leu Ser Asp Lys Tyr Ser Gln Ala Cys His Pro Leu Gly
        35                  40                  45

Ser Lys Val Arg Arg Cys Arg Lys Pro Gly Pro Arg Asp Arg Gln Leu
    50                  55                  60

Thr Arg Val Asp Lys Ser Pro Glu Met Trp Cys Ile Val Leu Phe Ser
65                  70                  75                  80

Leu Leu Ala Trp Val Tyr Ala Glu Pro Thr Met Tyr Gly Glu Ile Leu
                85                  90                  95

Ser Pro Asn Tyr Pro Gln Ala Tyr Pro Ser Glu Val Glu Lys Ser Trp
            100                 105                 110

Asp Ile Glu Val Pro Glu Gly Tyr Gly Ile His Leu Tyr Phe Thr His
            115                 120                 125

Leu Asp Ile Glu Leu Ser Glu Asn Cys Ala Tyr Asp Ser Val Gln Ile
    130                 135                 140

Ile Ser Gly Asp Thr Glu Glu Gly Arg Leu Cys Gly Gln Arg Ser Ser
145                 150                 155                 160

Asn Asn Pro His Ser Pro Ile Val Glu Glu Phe Gln Val Pro Tyr Asn
                165                 170                 175

Lys Leu Gln Val Ile Phe Lys Ser Asp Phe Ser Asn Glu Glu Arg Phe
            180                 185                 190

Thr Gly Phe Ala Ala Tyr Tyr Val Ala Thr Asp Ile Asn Glu Cys Thr
            195                 200                 205
```

```
Asp Phe Val Asp Val Pro Cys Ser His Phe Cys Asn Asn Phe Ile Gly
    210             215             220

Gly Tyr Phe Cys Ser Cys Pro Pro Glu Tyr Phe Leu His Asp Asp Met
225             230             235             240

Lys Asn Cys Gly Val Asn Cys Ser Gly Asp Val Phe Thr Ala Leu Ile
            245             250             255

Gly Glu Ile Ala Ser Pro Asn Tyr Pro Lys Pro Tyr Pro Glu Asn Ser
            260             265             270

Arg Cys Glu Tyr Gln Ile Arg Leu Glu Lys Gly Phe Gln Val Val Val
        275             280             285

Thr Leu Arg Arg Glu Asp Phe Asp Val Glu Ala Ala Asp Ser Ala Gly
    290             295             300

Asn Cys Leu Asp Ser Leu Val Phe Val Ala Gly Asp Arg Gln Phe Gly
305             310             315             320

Pro Tyr Cys Gly His Gly Phe Pro Gly Xaa Leu Asn Ile Glu Thr Lys
            325             330             335

Ser Asn Ala Leu Asp Ile Ile Phe Gln Thr Asp Leu Thr Gly Gln Lys
            340             345             350

Lys Gly Trp Lys Leu Arg Tyr His Gly Asp Pro Met Pro Cys Pro Lys
            355             360             365

Glu Asp Thr Pro Asn Ser Val Trp Glu Pro Ala Lys Ala Lys Tyr Val
    370             375             380

Phe Arg Asp Val Val Gln Ile Thr Cys Leu Asp Gly Phe Glu Val Val
385             390             395             400

Glu Gly Arg Val Gly Ala Thr Ser Phe Tyr Ser Thr Cys Gln Ser Asn
            405             410             415

Gly Lys Trp Ser Asn Ser Lys Leu Lys Cys Gln Pro Val Asp Cys Gly
            420             425             430

Ile Pro Glu Ser Ile Glu Asn Gly Lys Val Glu Asp Pro Glu Ser Thr
        435             440             445

Leu Phe Gly Ser Val Ile Arg Tyr Thr Cys Glu Glu Pro Tyr Tyr Tyr
    450             455             460

Met Glu Asn Gly Gly Gly Gly Glu Tyr His Cys Ala Gly Asn Gly Ser
465             470             475             480
```

Trp Val Asn Glu Val Leu Gly Pro Glu Leu Pro Lys Cys Val Pro Val
            485   490   495

Cys Gly Val Pro Arg Glu Pro Phe Glu Glu Lys Gln Arg Ile Ile Gly
            500   505   510

Gly Ser Asp Ala Asp Ile Lys Asn Phe Pro Trp Gln Val Phe Phe Asp
            515   520   525

Asn Pro Trp Ala Gly Gly Ala Leu Ile Asn Glu Tyr Trp Val Leu Thr
    530   535   540

Ala Ala His Val Val Glu Gly Asn Arg Glu Pro Thr Met Tyr Val Gly
545   550   555   560

Ser Thr Ser Val Gln Thr Ser Arg Leu Ala Lys Ser Lys Met Leu Thr
            565   570   575

Pro Glu His Val Phe Ile His Pro Gly Trp Lys Leu Leu Glu Val Pro
            580   585   590

Glu Gly Arg Thr Asn Phe Asp Asn Asp Ile Ala Leu Val Arg Leu Lys
            595   600   605

Asp Pro Val Lys Met Gly Pro Thr Val Ser Pro Ile Cys Leu Pro Gly
    610   615   620

Thr Ser Ser Asp Tyr Asn Leu Met Asp Gly Asp Leu Gly Leu Ile Ser
625   630   635   640

Gly Trp Gly Arg Thr Glu Lys Arg Asp Arg Ala Val Arg Leu Lys Ala
            645   650   655

Ala Arg Leu Pro Val Ala Pro Leu Arg Lys Cys Lys Glu Val Lys Val
            660   665   670

Glu Lys Pro Thr Ala Asp Ala Glu Ala Tyr Val Phe Thr Pro Asn Met
            675   680   685

Ile Cys Ala Gly Gly Glu Lys Gly Met Asp Ser Cys Lys Gly Asp Ser
    690   695   700

Gly Gly Ala Phe Ala Val Gln Asp Pro Asn Asp Lys Thr Lys Phe Tyr
705   710   715   720

Ala Ala Gly Leu Val Ser Trp Gly Pro Gln Cys Gly Thr Tyr Gly Leu
            725   730   735

Tyr Thr Arg Val Lys Asn Tyr Val Asp Trp Ile Met Lys Thr Met Gln
            740   745   750

1000

```
Glu Asn Ser Thr Pro Arg Glu Asp
        755                 760
```

<210> 1025
<211> 216
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1025

```
Gly Gly Gly Arg Leu Arg Arg Arg Arg Ser Gly Ser Pro Gly Trp Arg
  1               5                  10                  15

Ala Pro Arg Thr Gly Met Leu Leu Gly Leu Ala Ala Met Glu Leu Lys
               20                  25                  30

Val Trp Val Asp Gly Ile Gln Arg Val Val Cys Gly Val Ser Glu Gln
           35                  40                  45

Thr Thr Cys Gln Glu Val Val Ile Ala Leu Ala Gln Ala Ile Gly Gln
    50                  55                  60

Thr Gly Arg Phe Val Leu Val Gln Arg Leu Arg Glu Lys Glu Arg Gln
 65                  70                  75                  80

Leu Leu Pro Gln Glu Cys Pro Val Gly Ala Gln Ala Thr Cys Gly Gln
               85                  90                  95

Phe Ala Ser Asp Val Gln Phe Val Leu Arg Arg Thr Gly Pro Ser Leu
               100                 105                 110

Ala Gly Xaa Pro Ser Ser Asp Ser Cys Pro Pro Pro Glu Arg Cys Leu
           115                 120                 125

Ile Arg Ala Ser Leu Pro Val Lys Pro Arg Xaa Ala Leu Gly Cys Glu
        130                 135                 140

Pro Arg Lys Thr Leu Thr Pro Glu Pro Ala Pro Ser Leu Ser Arg Pro
145                 150                 155                 160
```

```
Gly Pro Ala Ala Cys Glu His Pro His Gln Ala Ala Ala Gln Thr Cys
            165             170             175

Gly Ala Trp Ser Ser Gly Cys Arg Gly Met Leu Arg Ser Trp Ala Met
            180             185             190

Arg Pro Ser Gly Ser Lys Ser Cys Ala Gly Ser Arg Pro Gly Ser Glu
            195             200             205

Arg Asp Arg His Ala Cys Arg His
    210             215
```

```
<210> 1026
<211> 604
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (303)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (359)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1026
Gly Thr Ser Ser Asp Ile Leu Lys Gly Asn Phe Ser Ile Arg Thr Ala
  1           5               10              15

Lys Met Gln Gln His Val Cys Glu Thr Ile Ile Arg Ile Phe Lys Arg
            20              25              30

His Gly Ala Val Gln Leu Cys Thr Pro Leu Leu Leu Pro Arg Asn Arg
        35              40              45

Gln Ile Tyr Glu His Asn Glu Ala Ala Leu Phe Met Asp His Ser Gly
    50              55              60

Met Leu Val Met Leu Pro Phe Asp Leu Arg Ile Pro Phe Ala Arg Tyr
65              70              75              80

Val Ala Arg Asn Asn Ile Leu Asn Leu Lys Arg Tyr Cys Ile Glu Arg
                85              90              95

Val Phe Arg Pro Arg Lys Leu Asp Arg Phe His Pro Lys Glu Leu Leu
            100             105             110
```

1002

```
Glu Cys Ala Phe Asp Ile Val Thr Ser Thr Thr Asn Ser Phe Leu Pro
        115             120             125

Thr Ala Glu Ile Ile Tyr Thr Ile Tyr Glu Ile Ile Gln Glu Phe Pro
    130             135             140

Ala Leu Gln Glu Arg Asn Tyr Ser Ile Tyr Leu Asn His Thr Met Leu
145             150             155             160

Leu Lys Ala Ile Leu Leu His Cys Gly Ile Pro Glu Asp Lys Leu Ser
            165             170             175

Gln Val Tyr Ile Ile Leu Tyr Asp Ala Val Thr Glu Lys Leu Thr Arg
            180             185             190

Arg Glu Val Glu Ala Lys Phe Cys Asn Leu Ser Leu Ser Ser Asn Ser
        195             200             205

Leu Cys Arg Leu Tyr Lys Phe Ile Glu Gln Lys Gly Asp Leu Gln Asp
    210             215             220

Leu Met Pro Thr Ile Asn Ser Leu Ile Lys Gln Lys Thr Gly Ile Ala
225             230             235             240

Gln Leu Val Lys Tyr Gly Leu Lys Asp Leu Glu Glu Val Val Gly Leu
            245             250             255

Leu Lys Lys Leu Gly Ile Lys Leu Gln Val Leu Ile Asn Leu Gly Leu
            260             265             270

Val Tyr Lys Val Gln Gln His Asn Gly Ile Ile Phe Gln Phe Val Ala
        275             280             285

Phe Ile Lys Arg Arg Gln Arg Ala Val Pro Glu Ile Leu Ala Xaa Gly
    290             295             300

Gly Arg Tyr Asp Leu Leu Ile Pro Gln Phe Arg Gly Pro Gln Ala Leu
305             310             315             320

Gly Pro Val Pro Thr Ala Ile Gly Val Ser Ile Ala Ile Asp Lys Ile
            325             330             335

Ser Ala Ala Val Leu Asn Met Glu Glu Ser Val Thr Ile Ser Ser Cys
            340             345             350

Asp Leu Leu Val Val Ser Xaa Gly Gln Met Ser Met Ser Arg Ala Ile
        355             360             365

Asn Leu Thr Gln Lys Leu Trp Thr Ala Gly Ile Thr Ala Glu Ile Met
    370             375             380
```

```
Tyr Asp Trp Ser Gln Ser Gln Glu Glu Leu Gln Glu Tyr Cys Arg His
385             390             395             400

His Glu Ile Thr Tyr Val Ala Leu Val Ser Asp Lys Glu Gly Ser His
            405             410             415

Val Lys Val Lys Ser Phe Glu Lys Glu Arg Gln Thr Glu Lys Arg Val
            420             425             430

Leu Glu Thr Glu Leu Val Asp His Val Leu Gln Lys Leu Arg Thr Lys
            435             440             445

Val Thr Asp Glu Arg Asn Gly Arg Glu Ala Ser Asp Asn Leu Ala Val
    450             455             460

Gln Asn Leu Lys Gly Ser Phe Ser Asn Ala Ser Gly Leu Phe Glu Ile
465             470             475             480

His Gly Ala Thr Val Val Pro Ile Val Ser Val Leu Ala Pro Glu Lys
            485             490             495

Leu Ser Ala Ser Thr Arg Arg Arg Tyr Glu Thr Gln Val Gln Thr Arg
            500             505             510

Leu Gln Thr Ser Leu Ala Asn Leu His Gln Lys Ser Ser Glu Ile Glu
            515             520             525

Ile Leu Ala Val Asp Leu Pro Lys Glu Thr Ile Leu Gln Phe Leu Ser
    530             535             540

Leu Glu Trp Asp Ala Asp Glu Gln Ala Phe Asn Thr Thr Val Lys Gln
545             550             555             560

Leu Leu Ser Arg Leu Pro Lys Gln Arg Tyr Leu Lys Leu Val Cys Asp
            565             570             575

Glu Ile Tyr Asn Ile Lys Val Glu Lys Lys Val Ser Val Leu Phe Leu
            580             585             590

Tyr Ser Tyr Arg Asp Asp Tyr Tyr Arg Ile Leu Phe
            595             600
```

<210> 1027
<211> 459
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1027
Thr Ser Cys Gly Ile Asn Thr Lys Phe Thr Ser Lys Glu Pro Ile Phe
 1   5   10   15

Leu Thr Gln Leu Leu His Phe Ser Asn Leu Xaa Gln Glu Tyr Lys Ile
            20   25   30

Asn Ser Arg Leu Leu Gln Asn Ile Leu Asp Ala Gly Phe Gln Met Pro
            35   40   45

Thr Pro Ile Gln Met Gln Ala Ile Pro Val Met Leu His Gly Arg Glu
        50   55   60

Leu Leu Ala Ser Ala Pro Thr Gly Ser Gly Lys Thr Leu Ala Phe Ser
65   70   75   80

Ile Pro Ile Leu Met Gln Leu Lys Gln Pro Ala Asn Lys Gly Phe Arg
                85   90   95

Ala Leu Ile Ile Ser Pro Thr Arg Glu Leu Ala Ser Gln Ile His Arg
            100   105   110

Glu Leu Ile Lys Ile Ser Glu Gly Thr Gly Phe Arg Ile His Met Ile
            115   120   125

His Lys Ala Ala Val Ala Ala Lys Lys Phe Gly Pro Lys Ser Ser Lys
    130   135   140

Lys Phe Asp Ile Leu Val Thr Thr Pro Asn Arg Leu Ile Tyr Leu Leu
145   150   155   160

Lys Gln Asp Pro Pro Gly Ile Asp Leu Ala Ser Val Glu Trp Leu Val
                165   170   175

Val Asp Glu Ser Asp Lys Leu Phe Glu Asp Gly Lys Thr Gly Phe Arg
            180   185   190

Asp Gln Leu Ala Ser Ile Phe Leu Ala Cys Thr Ser His Lys Val Arg
            195   200   205

Arg Ala Met Phe Ser Ala Thr Phe Ala Tyr Asp Val Glu Gln Trp Cys
    210   215   220

Lys Leu Asn Leu Asp Asn Val Ile Ser Val Ser Ile Gly Ala Arg Asn
225   230   235   240

Ser Ala Val Glu Thr Val Glu Gln Glu Leu Leu Phe Val Gly Ser Glu

1005

```
                        245                 250                 255

     Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn
              260                 265                 270

     Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu
              275                 280                 285

     Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala
          290                 295                 300

     Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala
     305             310                 315                 320

     Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile
                  325                 330                 335

     Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser
              340                 345                 350

     Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn
              355                 360                 365

     Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu
          370                 375                 380

     Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu
     385             390                 395                 400

     Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Lys Met
                  405                 410                 415

     Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys
                  420                 425                 430

     Phe Leu Glu Lys Ala Lys Asp Lys Gln Lys Lys Val Thr Gly Gln Asn
              435                 440                 445

     Ser Lys Lys Lys Val Ala Leu Glu Asp Lys Ser
          450                 455
```

```
<210> 1028
<211> 68
<212> PRT
<213> Homo sapiens

<400> 1028
Gln Arg Gly Phe Tyr Ala Asn Ala Leu Thr Ser Ala Leu Gly Asn Glu
  1               5                  10                  15
```

1006

Arg Val Thr Ser Ala Ser Ser Leu Ala Ser Phe Leu Val Leu Glu Arg
            20   25   30

Leu Thr Asn Val Cys His Ser His Lys Cys Phe Glu Leu Asp Leu Cys
            35   40   45

Asp Leu Cys Phe Phe Ser Phe Ser Leu Glu Ser Glu Tyr His Cys Leu
     50   55   60

Pro Pro Arg Ser
 65

<210> 1029
<211> 215
<212> PRT
<213> Homo sapiens

<400> 1029
Tyr Pro Leu Thr Pro Ala Pro Ala Pro His Asp Pro Ser Pro Arg Ala
  1   5   10   15

His Gly Arg Gly Asp Asp Val Thr Gln Ala Thr Ala Leu Thr Ser His
            20   25   30

Ile Thr Val Val Met Ala Ser Arg Gly His Val Asp Val Thr Lys Arg
            35   40   45

Tyr Ser Asp Gly Val Val Gln Met Gln His Val Ala His Arg His Gly
     50   55   60

Glu Leu Gly Met Thr Ser His Arg Asp Ala Ala Thr Thr Ser Arg Ala
 65   70   75   80

Met Ser Thr Ser His Ile Leu Met Ser His Arg Arg Gly Asp Gly Ile
            85   90   95

Thr Gln Thr Val Met Met Ser His Thr Asp Thr Val Thr Thr His Thr
            100   105   110

Met Thr Thr Thr Pro Ile Asp Met Ala Pro Thr Ser His Ala Arg Met
            115   120   125

Pro Phe His Thr His Phe Leu Pro Asn Ser His Leu Val Ser Arg Ser
     130   135   140

Pro Asp Pro Gly Thr Arg Ala Lys Val Pro Thr Gly Ser His Pro Leu
145   150   155   160

1007

```
        Pro His Ser Pro Gly Pro Gln His Leu Pro Ser Ser Ser Phe Leu Ala
                        165             170             175

        Ser Gln Pro Leu Pro His Pro Gln Cys Leu Asp Pro Glu Val Arg Thr
                        180             185             190

        Gly Ser His Ser Pro Pro Leu Leu Glu Arg Glu Cys Phe Gln Asp Pro
                    195             200             205

        Leu Gly Ala Leu Ser Arg Gly
            210             215
```

<210> 1030
<211> 297
<212> PRT
<213> Homo sapiens

<400> 1030

```
        Lys Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg
          1               5               10              15

        Val Arg Pro Arg Val Arg Pro Arg Val Arg Trp Thr Ala Ala Met Arg
                        20              25              30

        Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu Ala Leu
                    35              40              45

        Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp Glu Gln
            50              55              60

        Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu Thr Lys
          65              70              75              80

        Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys Phe Phe
                        85              90              95

        Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu Ile Met
                        100             105             110

        Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser Leu Phe
                        115             120             125

        Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg Ile Val
            130             135             140

        Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu Val Ser
        145             150             155             160

        Lys Ala Leu Asn Met Trp Gly Lys Glu Ile Pro Leu His Phe Arg Lys
```

1008

```
                    165                   170                   175
   Val Val Trp Gly Thr Ala Asp Ile Met Ile Gly Phe Ala Arg Gly Ala
               180                   185                   190

   His Gly Asp Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu Ala His
               195                   200                   205

   Ala Phe Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe Asp Glu
       210                   215                   220

   Asp Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe Leu Tyr
   225                   230                   235                   240

   Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His Ser Ser
               245                   250                   255

   Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp Pro Gln
               260                   265                   270

   Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Lys Leu Tyr
               275                   280                   285

   Gly Lys Arg Ser Asn Ser Arg Lys Lys
       290                   295
```

<210> 1031
<211> 571
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (484)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1031
```
   Arg Val Arg Ser Lys Val Pro Arg Cys Val Asn Thr Gln Pro Gly Phe
    1                   5                   10                   15
```

His Cys Leu Pro Cys Pro Pro Arg Tyr Arg Gly Asn Gln Pro Val Gly
            20   25   30

Val Gly Leu Glu Ala Ala Lys Thr Glu Lys Gln Xaa Cys Glu Pro Glu
            35   40   45

Asn Pro Cys Lys Asp Lys Thr His Asn Cys His Lys His Ala Glu Cys
        50   55   60

Ile Tyr Leu Gly His Phe Ser Asp Pro Met Tyr Lys Cys Glu Cys Gln
65   70   75   80

Xaa Gly Tyr Ala Gly Asp Gly Leu Ile Cys Gly Glu Asp Ser Asp Leu
                85   90   95

Asp Gly Trp Pro Asn Leu Asn Leu Val Cys Ala Thr Asn Ala Thr Tyr
            100   105   110

His Cys Ile Lys Asp Asn Cys Pro His Leu Pro Asn Ser Gly Gln Glu
        115   120   125

Asp Phe Asp Lys Asp Gly Ile Gly Asp Ala Cys Asp Asp Asp Asp
    130   135   140

Asn Asp Gly Val Thr Asp Glu Lys Asp Asn Cys Gln Leu Leu Phe Asn
145   150   155   160

Pro Arg Gln Ala Asp Tyr Asp Lys Asp Glu Val Gly Asp Arg Cys Asp
            165   170   175

Asn Cys Pro Tyr Val His Asn Pro Ala Gln Ile Asp Thr Asp Asn Asn
            180   185   190

Gly Glu Gly Asp Ala Cys Ser Val Asp Ile Asp Gly Asp Asp Val Phe
        195   200   205

Asn Glu Arg Asp Asn Cys Pro Tyr Val Tyr Asn Thr Asp Gln Arg Asp
    210   215   220

Thr Asp Gly Asp Gly Val Gly Asp His Cys Asp Asn Cys Pro Leu Val
225   230   235   240

His Asn Pro Asp Gln Thr Asp Val Asp Asn Asp Leu Val Gly Asp Gln
            245   250   255

Cys Asp Asn Asn Glu Asp Ile Asp Asp Asp Gly His Gln Asn Asn Gln
        260   265   270

Asp Asn Cys Pro Tyr Ile Ser Asn Ala Asn Gln Ala Asp His Asp Arg
    275   280   285

1010

```
Asp Gly Gln Gly Asp Ala Cys Asp Pro Asp Asp Asp Asn Asp Gly Val
    290             295             300

Pro Asp Asp Arg Asp Asn Cys Arg Leu Val Phe Asn Pro Asp Gln Glu
305             310             315             320

Asp Leu Asp Gly Asp Gly Arg Gly Asp Ile Cys Lys Asp Asp Phe Asp
            325             330             335

Asn Asp Asn Ile Pro Asp Ile Asp Asp Val Cys Pro Glu Asn Asn Ala
            340             345             350

Ile Ser Glu Thr Asp Phe Arg Asn Phe Gln Met Val Pro Leu Asp Pro
            355             360             365

Lys Gly Thr Thr Gln Ile Asp Pro Asn Trp Val Ile Arg His Gln Gly
    370             375             380

Lys Glu Leu Val Gln Thr Ala Asn Ser Asp Pro Gly Ile Ala Val Gly
385             390             395             400

Phe Asp Glu Phe Gly Ser Val Asp Phe Ser Gly Thr Phe Tyr Val Asn
            405             410             415

Thr Asp Arg Asp Asp Asp Tyr Ala Gly Phe Val Phe Gly Tyr Gln Ser
            420             425             430

Ser Ser Arg Phe Tyr Val Val Met Trp Lys Gln Val Thr Gln Thr Tyr
    435             440             445

Trp Glu Asp Gln Pro Thr Arg Ala Tyr Gly Tyr Ser Gly Val Ser Leu
    450             455             460

Lys Val Val Asn Ser Thr Thr Gly Thr Gly Glu His Leu Arg Asn Ala
465             470             475             480

Leu Trp His Xaa Gly Asn Thr Pro Gly Gln Val Arg Thr Leu Trp His
            485             490             495

Asp Pro Arg Asn Ile Gly Trp Lys Asp Tyr Thr Ala Tyr Arg Trp His
            500             505             510

Leu Thr His Arg Pro Lys Thr Gly Tyr Ile Arg Val Leu Val His Glu
            515             520             525

Gly Lys Gln Val Met Ala Asp Ser Gly Pro Ile Tyr Asp Gln Thr Tyr
    530             535             540

Ala Gly Gly Arg Leu Gly Leu Phe Val Phe Ser Gln Glu Met Val Tyr
545             550             555             560
```

Phe Ser Asp Leu Lys Tyr Glu Cys Arg Asp Ile
                565   570

<210> 1032
<211> 114
<212> PRT
<213> Homo sapiens

<400> 1032
Gly Arg Gly Thr Ala Thr Phe Pro Thr Gly His Glu Phe Val Gly Pro
 1   5   10   15

Cys Leu Gly Arg Ala Glu Ala Phe Trp Arg Ser Lys Met Gly Arg Lys
                20   25   30

Asp Ala Ala Thr Ile Lys Leu Pro Val Asp Gln Tyr Arg Lys Gln Ile
            35   40   45

Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu Arg Ala Thr Lys
        50   55   60

Leu Lys Ala Glu Ala Lys Lys Thr Ala Ile Gly Ile Lys Glu Val Gly
 65   70   75   80

Leu Val Leu Ala Ala Ile Leu Ala Leu Leu Leu Ala Phe Tyr Ala Phe
                85   90   95

Phe Tyr Leu Arg Leu Thr Thr Asp Val Asp Pro Asp Leu Asp Gln Asp
            100   105   110

Glu Asp

<210> 1033
<211> 243
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)

1012

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1033
```
His Arg Arg Asp Glu Ala Leu Gln Ser Leu Arg Phe Arg Arg Arg Pro
 1               5                  10                  15

Gly Ala Gln Ala Ala Asp Ala Cys Gly Pro Arg Ala Asp Leu Gly Gly
                20                  25                  30

Pro Arg Glu Pro Ala Ala Gly Gly Arg Ala Ala Trp His Arg Pro Ala
            35                  40                  45

Ala Arg Gly Gln Ser Pro Arg Arg Cys His Ala Gly Val His Arg Ser
        50                  55                  60

Gln Cys His Leu Cys Arg Leu Gly Ala Ala Glu Arg Phe Arg Gly Ile
65                  70                  75                  80

Val Ala Leu Leu Ala Ser Arg Xaa Leu Leu Arg Pro Pro Leu His Trp
                85                  90                  95

Val Leu Leu Ala Xaa Ala Leu Val Asn Leu Leu Leu Ser Val Ala Cys
                100                 105                 110

Ser Leu Gly Leu Leu Leu Ala Val Ser Leu Thr Val Ala Asn Gly Gly
            115                 120                 125

Arg Arg Leu Ile Ala Asp Cys His Pro Gly Leu Leu Asp Pro Leu Val
    130                 135                 140

Pro Leu Asp Glu Gly Pro Gly His Thr Asp Cys Pro Phe Asp Pro Thr
145                 150                 155                 160

Arg Ile Tyr Asp Thr Ala Leu Ala Leu Trp Ile Pro Ser Leu Leu Met
            165                 170                 175

Ser Ala Gly Glu Ala Ala Leu Ser Gly Tyr Cys Cys Val Ala Ala Leu
            180                 185                 190

Thr Leu Arg Gly Val Gly Pro Cys Arg Lys Asp Gly Leu Gln Gly Gln
        195                 200                 205

Leu Glu Glu Met Thr Glu Leu Glu Ser Pro Lys Cys Lys Arg Gln Glu
    210                 215                 220

Asn Glu Gln Leu Leu Asp Gln Asn Gln Glu Ile Arg Ala Ser Gln Arg
225                 230                 235                 240

Ser Trp Val
```

<210> 1034
<211> 173
<212> PRT
<213> Homo sapiens

<400> 1034
Tyr Thr Trp His Ser Glu Lys Met Asp Leu Lys Asp Lys Asn Gly Gly
 1   5   10   15

Pro Gly Arg Cys Asn Ser His Arg Leu Lys Val Ser Ser Gly Leu Cys
            20   25   30

Lys Thr His Glu Ile Gly Phe Asp Pro Leu Ala Leu Lys Cys Pro Leu
        35   40   45

Arg Ser Arg Thr Ala Pro Trp Trp Pro Leu Asp Arg Val Ser Phe Asp
    50   55   60

Leu His His Leu Val Ile Gly Asn Phe Phe Val Gly Asn Arg Lys Ile
65   70   75   80

Phe Leu Asp Tyr Leu Val Tyr Gly Phe Ala His Asn Asn Arg Trp Lys
                85   90   95

Leu Leu Val Gln Ser Trp Ser Asp Gly Cys Val His Arg Thr Phe Gly
            100   105   110

Leu Val Lys Ser Phe Ser Lys Ala Ser Phe Cys Ile Phe Ile Thr Lys
            115   120   125

Gln Arg Lys Ser Ser Glu Asp Leu Ala Leu Lys Gln Ile Cys Ala Asn
    130   135   140

Thr Ala Arg Val Ile Leu Lys Leu Lys His Phe His Phe Val Ser Tyr
145   150   155   160

Met Cys Thr Phe Leu Phe Thr Cys Glu Asn Gly His Leu
                165   170

<210> 1035
<211> 241
<212> PRT
<213> Homo sapiens

<400> 1035
Ser Phe Ser Glu Met Ala Gly Val Ser Ala Cys Ile Lys Tyr Ser Met
 1   5   10   15

1014

```
Phe Thr Phe Asn Phe Leu Phe Trp Leu Cys Gly Ile Leu Ile Leu Ala
            20              25              30

Leu Ala Ile Trp Val Arg Val Ser Asn Asp Ser Gln Ala Ile Phe Gly
            35              40              45

Ser Glu Asp Val Gly Ser Ser Ser Tyr Val Ala Val Asp Ile Leu Ile
        50              55              60

Ala Val Gly Ala Ile Ile Met Ile Leu Gly Phe Leu Gly Cys Cys Gly
65              70              75              80

Ala Ile Lys Glu Ser Arg Cys Met Leu Leu Leu Phe Phe Ile Gly Leu
                85              90              95

Leu Leu Ile Leu Leu Leu Gln Val Ala Thr Gly Ile Leu Gly Ala Val
            100             105             110

Phe Lys Ser Lys Ser Asp Arg Ile Val Asn Glu Thr Leu Tyr Glu Asn
            115             120             125

Thr Lys Leu Leu Ser Ala Thr Gly Glu Ser Glu Lys Gln Phe Gln Glu
    130             135             140

Ala Ile Ile Val Phe Gln Glu Glu Phe Lys Cys Cys Gly Leu Val Asn
145             150             155             160

Gly Ala Ala Asp Trp Gly Asn Asn Phe Gln His Tyr Pro Glu Leu Cys
            165             170             175

Ala Cys Leu Asp Lys Gln Arg Pro Cys Gln Ser Tyr Asn Gly Lys Gln
            180             185             190

Val Tyr Lys Glu Thr Cys Ile Ser Phe Ile Lys Asp Phe Leu Ala Lys
            195             200             205

Asn Leu Ile Ile Val Ile Gly Ile Ser Phe Gly Leu Ala Val Ile Glu
    210             215             220

Ile Leu Gly Leu Val Phe Ser Met Val Leu Tyr Cys Gln Ile Gly Asn
225             230             235             240

Lys
```

```
<210> 1036
<211> 335
<212> PRT
```

```
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1036
Pro Thr Xaa Gly Arg Ala Glu Glu Ala Lys Met Ala Ala Ala Ala Ala
 1           5                   10                  15


Ser Leu Arg Gly Val Val Leu Gly Pro Arg Gly Ala Gly Leu Pro Gly
            20                  25                  30


Ala Arg Ala Arg Gly Leu Leu Cys Ser Ala Arg Pro Gly Gln Leu Pro
            35                  40                  45


Leu Arg Thr Pro Gln Ala Val Ala Leu Ser Ser Lys Ser Gly Leu Ser
    50                  55                  60


Arg Gly Arg Lys Val Met Leu Ser Ala Leu Gly Met Leu Ala Ala Gly
65                  70                  75                  80


Gly Ala Gly Leu Ala Val Ala Leu His Ser Ala Val Ser Ala Ser Asp
                85                  90                  95


Leu Glu Leu His Pro Pro Ser Tyr Pro Trp Ser His Arg Gly Leu Leu
            100                 105                 110


Ser Ser Leu Asp His Thr Ser Ile Arg Arg Gly Phe Gln Val Tyr Lys
            115                 120                 125


Gln Val Cys Ala Ser Cys His Ser Met Asp Phe Val Ala Tyr Arg His
    130                 135                 140


Leu Val Gly Val Cys Tyr Thr Glu Asp Glu Ala Lys Glu Leu Ala Ala
145                 150                 155                 160


Glu Val Glu Val Gln Asp Gly Pro Asn Glu Asp Gly Glu Met Phe Met
                165                 170                 175


Arg Pro Gly Lys Leu Phe Asp Tyr Phe Pro Lys Pro Tyr Pro Asn Ser
            180                 185                 190


Glu Ala Ala Arg Ala Ala Asn Asn Gly Ala Leu Pro Pro Asp Leu Ser
            195                 200                 205


Tyr Ile Val Arg Ala Arg His Gly Gly Glu Asp Tyr Val Phe Ser Leu
    210                 215                 220


Leu Thr Gly Tyr Cys Glu Pro Pro Thr Gly Val Ser Leu Arg Glu Gly
```

1016

225   230   235   240

Leu Tyr Phe Asn Pro Tyr Phe Pro Gly Gln Ala Ile Ala Met Ala Pro
                245   250   255

Pro Ile Tyr Thr Asp Val Leu Glu Phe Asp Asp Gly Thr Pro Ala Thr
                260   265   270

Met Ser Gln Ile Ala Lys Asp Val Cys Thr Phe Leu Arg Trp Ala Ser
            275   280   285

Glu Pro Glu His Asp His Arg Lys Arg Met Gly Leu Lys Met Leu Met
        290   295   300

Met Met Ala Leu Leu Val Pro Leu Val Tyr Thr Ile Lys Arg His Lys
305   310   315   320

Trp Ser Val Leu Lys Ser Arg Lys Leu Ala Tyr Arg Pro Pro Lys
                325   330   335

<210> 1037
<211> 511
<212> PRT
<213> Homo sapiens

<400> 1037
His Gln Leu Gln Gly Pro Leu Pro Leu Arg Ala Leu Pro Trp His Ser
 1   5   10   15

Ser Arg Ser Arg Val Thr Cys Thr Arg Cys Phe Ser Trp Met His Pro
            20   25   30

Ser Pro Met His Pro Leu Arg Ala Gly Ser Lys Ser Gln Gly Ser Arg
        35   40   45

Ser Pro Ala Pro Ser Pro Met Arg Ala Ala Asn Arg Ser His Ser Ala
        50   55   60

Gly Arg Thr Pro Gly Arg Thr Pro Gly Lys Ser Ser Ser Lys Val Gln
65   70   75   80

Thr Thr Pro Ser Lys Pro Gly Gly Asp Arg Tyr Ile Pro His Arg Ser
                85   90   95

Ala Ala Gln Met Glu Val Ala Ser Phe Leu Leu Ser Lys Glu Asn Gln
            100   105   110

Pro Glu Asn Ser Gln Thr Pro Thr Lys Lys Glu His Gln Lys Ala Trp
        115   120   125

```
Ala Leu Asn Leu Asn Gly Phe Asp Val Glu Glu Ala Lys Ile Leu Arg
    130             135             140

Leu Ser Gly Lys Pro Gln Asn Ala Pro Glu Gly Tyr Gln Asn Arg Leu
145             150             155             160

Lys Val Leu Tyr Ser Gln Lys Ala Thr Pro Gly Ser Ser Arg Lys Thr
            165             170             175

Cys Arg Tyr Ile Pro Ser Leu Pro Asp Arg Ile Leu Asp Ala Pro Glu
            180             185             190

Ile Arg Asn Asp Tyr Tyr Leu Asn Leu Val Asp Trp Ser Ser Gly Asn
            195             200             205

Val Leu Ala Val Ala Leu Asp Asn Ser Val Tyr Leu Trp Ser Ala Ser
    210             215             220

Ser Gly Asp Ile Leu Gln Leu Leu Gln Met Glu Gln Pro Gly Glu Tyr
225             230             235             240

Ile Ser Ser Val Ala Trp Ile Lys Glu Gly Asn Tyr Leu Ala Val Gly
            245             250             255

Thr Ser Ser Ala Glu Val Gln Leu Trp Asp Val Gln Gln Gln Lys Arg
            260             265             270

Leu Arg Asn Met Thr Ser His Ser Ala Arg Val Gly Ser Leu Ser Trp
            275             280             285

Asn Ser Tyr Ile Leu Ser Ser Gly Ser Arg Ser Gly His Ile His His
            290             295             300

His Asp Val Arg Val Ala Glu His His Val Ala Thr Leu Ser Gly His
305             310             315             320

Ser Gln Glu Val Cys Gly Leu Arg Trp Ala Pro Asp Gly Arg His Leu
            325             330             335

Ala Ser Gly Gly Asn Asp Asn Leu Val Asn Val Trp Pro Ser Ala Pro
            340             345             350

Gly Glu Gly Gly Trp Val Pro Leu Gln Thr Phe Thr Gln His Gln Gly
            355             360             365

Ala Val Lys Ala Val Ala Trp Cys Pro Trp Gln Ser Asn Val Leu Ala
    370             375             380

Thr Gly Gly Gly Thr Ser Asp Arg His Ile Arg Ile Trp Asn Val Cys
385             390             395             400
```

```
Ser Gly Ala Cys Leu Ser Ala Val Asp Ala His Ser Gln Val Cys Ser
            405                 410                 415

Ile Leu Trp Ser Pro His Tyr Lys Glu Leu Ile Ser Gly His Gly Phe
            420                 425                 430

Ala Gln Asn Gln Leu Val Ile Trp Lys Tyr Pro Thr Met Ala Lys Val
            435                 440                 445

Ala Glu Leu Lys Gly His Thr Ser Arg Val Leu Ser Leu Thr Met Ser
    450                 455                 460

Pro Asp Gly Ala Thr Val Ala Ser Ala Ala Ala Asp Glu Thr Leu Arg
465                 470                 475                 480

Leu Trp Arg Cys Phe Glu Leu Asp Pro Ala Arg Arg Arg Glu Arg Glu
            485                 490                 495

Lys Ala Ser Ala Ala Lys Ser Ser Leu Ile His Gln Gly Ile Arg
            500                 505                 510
```

```
<210> 1038
<211> 209
<212> PRT
<213> Homo sapiens

<400> 1038
His Glu Pro Pro Ser Ala Ser Ser Val Ala Gly Asp Leu Gly Arg Gly
 1               5               10                  15

Thr Arg Thr Glu Val Glu Ala Arg Ala Ala Arg Pro Gly Ala Glu Ser
            20              25                  30

Ala Pro Ala Ala Ala Met Pro Asp Ser Trp Asp Lys Asp Val Tyr Pro
        35              40                  45

Glu Pro Pro Arg Arg Thr Pro Val Gln Pro Asn Pro Ile Val Tyr Met
    50              55                  60

Met Lys Ala Phe Asp Leu Ile Val Asp Arg Pro Val Thr Leu Val Arg
65              70                  75                  80

Glu Phe Ile Glu Arg Gln His Ala Lys Asn Arg Tyr Tyr Tyr Tyr His
            85                  90                  95

Arg Gln Tyr Arg Arg Val Pro Asp Ile Thr Glu Cys Lys Glu Glu Asp
        100                 105                 110
```

1019

Ile Met Cys Met Tyr Glu Ala Glu Met Gln Trp Lys Arg Asp Tyr Lys
        115   120   125

Val Asp Gln Glu Ile Ile Asn Ile Met Gln Asp Arg Leu Lys Ala Cys
    130   135   140

Gln Gln Arg Glu Gly Gln Asn Tyr Gln Gln Asn Cys Ile Lys Glu Val
145   150   155   160

Glu Gln Phe Thr Gln Val Ala Lys Ala Tyr Gln Asp Arg Tyr Gln Asp
            165   170   175

Leu Gly Ala Tyr Ser Ser Ala Arg Lys Cys Leu Ala Lys Gln Arg Gln
            180   185   190

Arg Met Leu Gln Glu Arg Lys Ala Ala Lys Glu Ala Ala Ala Ala Thr
        195   200   205

Ser

<210> 1039
<211> 219
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1039
Leu Ala Ala Pro Asp Leu Ser Lys Pro Arg Gly Tyr His Trp Asp Thr
1   5   10   15

Ser Asp Trp Met Pro Ser Val Pro Leu Pro Asp Ile Gln Glu Phe Pro
            20   25   30

Asn Tyr Glu Val Ile Asp Glu Gln Thr Pro Leu Tyr Ser Ala Asp Pro
        35   40   45

Asn Ala Ile Asp Thr Asp Tyr Tyr Pro Gly Gly Tyr Asp Ile Glu Ser
    50   55   60

Asp Phe Pro Pro Pro Pro Glu Asp Phe Pro Ala Ala Asp Glu Leu Pro
65   70   75   80

Pro Leu Pro Pro Glu Phe Ser Asn Gln Phe Glu Ser Ile His Pro Pro
            85   90   95

```
Arg Asp Met Pro Ala Ala Gly Ser Leu Gly Ser Ser Ser Arg Asn Arg
        100             105             110

Gln Arg Phe Asn Leu Asn Gln Tyr Leu Pro Asn Phe Tyr Pro Leu Asp
        115             120             125

Met Ser Glu Pro Gln Thr Lys Gly Thr Gly Glu Asn Ser Thr Cys Arg
    130             135             140

Glu Pro His Ala Pro Tyr Pro Pro Xaa Tyr Gln Arg His Phe Glu Ala
145             150             155             160

Pro Ala Val Glu Ser Met Pro Met Ser Val Tyr Ala Ser Thr Ala Ser
            165             170             175

Cys Ser Asp Val Ser Ala Cys Cys Glu Val Glu Ser Glu Val Met Met
            180             185             190

Ser Asp Tyr Glu Ser Gly Asp Asp Gly His Phe Glu Glu Val Thr Ile
        195             200             205

Pro Pro Leu Asp Ser Gln Gln His Thr Glu Val
    210             215
```

```
<210> 1040
<211> 178
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1040
Phe Asp Leu Pro Tyr Arg Ala Glu Phe Gly Xaa Pro Gly Pro Pro Leu
  1             5               10              15

Ser Ala Ala Cys Ser Trp Lys Phe Arg Leu Gly Cys Leu Leu Gly Ala
            20              25              30

Met Glu Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys Gly Lys
        35              40              45

Phe Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly Lys Leu
    50              55              60

Arg Tyr Ala Asn Asn Ser Asn Tyr Lys Asn Asp Val Met Ile Arg Lys
```

1021

```
       65                    70                    75                    80

Glu Ala Tyr Val His Lys Ser Val Met Glu Glu Leu Lys Arg Ile Ile
                85                    90                    95

Asp Asp Ser Glu Ile Thr Lys Glu Asp Asp Ala Leu Trp Pro Pro Pro
            100                   105                   110

Asp Arg Val Gly Arg Gln Glu Leu Glu Ile Val Ile Gly Asp Glu His
            115                   120                   125

Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Ile Asp Val Asn Gln
            130                   135                   140

Ser Lys Asp Pro Glu Gly Leu Arg Val Phe Tyr Tyr Leu Val Gln Asp
145                   150                   155                   160

Leu Lys Cys Leu Val Phe Ser Leu Ile Gly Leu His Phe Lys Ile Lys
                165                   170                   175

Pro Ile
```

<210> 1041
<211> 121
<212> PRT
<213> Homo sapiens

<400> 1041
```
Leu Val Pro Asn Ser Ala Arg Ala Gly Ala Ser Tyr Ala Ala Ala Ala
  1               5                   10                    15

Val Thr Met Ala His Tyr Lys Ala Ala Asp Ser Lys Arg Glu Gln Phe
                20                    25                    30

Arg Arg Tyr Leu Glu Lys Ser Gly Val Leu Asp Thr Leu Thr Lys Val
            35                    40                    45

Leu Val Ala Leu Tyr Glu Glu Pro Glu Lys Pro Asn Ser Ala Leu Asp
            50                    55                    60

Phe Leu Lys His His Leu Gly Ala Ala Thr Pro Glu Asn Pro Glu Ile
65                    70                    75                    80

Glu Leu Leu Arg Leu Glu Leu Ala Glu Met Lys Glu Lys Tyr Glu Ala
                85                    90                    95

Ile Val Glu Glu Asn Lys Lys Leu Lys Ala Lys Leu Ala Gln Tyr Glu
            100                   105                   110
```

```
Pro Pro Gln Glu Glu Lys Arg Ala Glu
        115                 120
```

```
<210> 1042
<211> 253
<212> PRT
<213> Homo sapiens
```

```
<400> 1042
Val Asp Pro Arg Val Arg Pro Arg Ser Val Asn Gly Glu Leu Gln Lys
 1               5                   10                  15

Ala Ile Asp Leu Phe Thr Asp Ala Ile Lys Leu Asn Pro Arg Leu Ala
            20                  25                  30

Ile Leu Tyr Ala Lys Arg Ala Ser Val Phe Val Lys Leu Gln Lys Pro
        35                  40                  45

Asn Ala Ala Ile Arg Asp Cys Asp Arg Ala Ile Glu Ile Asn Pro Asp
    50                  55                  60

Ser Ala Gln Pro Tyr Lys Trp Arg Gly Lys Ala His Arg Leu Leu Gly
65                  70                  75                  80

His Trp Glu Glu Ala Ala His Asp Leu Ala Leu Ala Cys Lys Leu Asp
                85                  90                  95

Tyr Asp Glu Asp Ala Ser Ala Met Leu Lys Glu Val Gln Pro Arg Ala
            100                 105                 110

Gln Lys Ile Ala Glu His Arg Arg Lys Tyr Glu Arg Lys Arg Glu Glu
        115                 120                 125

Arg Glu Ile Lys Glu Arg Ile Glu Arg Val Lys Lys Ala Arg Glu Glu
    130                 135                 140

His Glu Arg Ala Gln Arg Glu Glu Glu Ala Arg Arg Gln Ser Gly Ala
145                 150                 155                 160

Gln Tyr Gly Ser Phe Pro Gly Gly Phe Pro Gly Gly Met Pro Gly Asn
            165                 170                 175

Phe Pro Gly Gly Met Pro Gly Met Gly Gly Met Pro Gly Met Ala
            180                 185                 190

Gly Met Pro Gly Leu Asn Glu Ile Leu Ser Asp Pro Glu Val Leu Ala
        195                 200                 205
```

```
Ala Met Gln Asp Pro Glu Val Met Val Ala Phe Gln Asp Val Ala Gln
    210                 215                 220

Asn Pro Ala Asn Met Ser Lys Tyr Gln Ser Asn Pro Lys Val Met Asn
225                 230                 235                 240

Leu Ile Ser Lys Leu Ser Ala Lys Phe Gly Gly Gln Ala
                    245                 250
```

```
<210> 1043
<211> 343
<212> PRT
<213> Homo sapiens

<400> 1043
Met Lys Thr Cys Gln Glu Glu Lys Leu Met Gly His Leu Gly Val Val
  1             5                 10                  15

Leu Tyr Glu Tyr Leu Gly Glu Glu Tyr Pro Glu Val Leu Gly Ser Ile
                20                  25                  30

Leu Gly Ala Leu Lys Ala Ile Val Asn Val Ile Gly Met His Lys Met
            35                  40                  45

Thr Pro Pro Ile Lys Asp Leu Leu Pro Arg Leu Thr Pro Ile Leu Lys
    50                  55                  60

Asn Arg His Glu Lys Val Gln Glu Asn Cys Ile Asp Leu Val Gly Arg
 65                  70                  75                  80

Ile Ala Asp Arg Gly Ala Glu Tyr Val Ser Ala Arg Glu Trp Met Arg
                85                  90                  95

Ile Cys Phe Glu Leu Leu Glu Leu Leu Lys Ala His Lys Lys Ala Ile
            100                 105                 110

Arg Arg Ala Thr Val Asn Thr Phe Gly Tyr Ile Ala Lys Ala Ile Gly
            115                 120                 125

Pro His Asp Val Leu Ala Thr Leu Leu Asn Asn Leu Lys Val Gln Glu
    130                 135                 140

Arg Gln Asn Arg Val Cys Thr Thr Val Ala Ile Ala Ile Val Ala Glu
145                 150                 155                 160

Thr Cys Ser Pro Phe Thr Val Leu Pro Ala Leu Met Asn Glu Tyr Arg
                165                 170                 175

Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu Lys Ser Leu Ser Phe
```

1024

```
                  180                    185                    190

    Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp Tyr Ile Tyr Ala Val
            195                    200                    205

    Thr Pro Leu Leu Glu Asp Ala Leu Met Asp Arg Asp Leu Val His Arg
            210                    215                    220

    Gln Thr Ala Ser Ala Val Val Gln His Met Ser Leu Gly Val Tyr Gly
    225                    230                    235                    240

    Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu Asn Tyr Val Trp Pro
                    245                    250                    255

    Asn Val Phe Glu Thr Ser Pro His Val Ile Gln Ala Val Met Gly Ala
                    260                    265                    270

    Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys Arg Met Leu Gln Tyr
            275                    280                    285

    Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys Val Arg Asp Val Tyr
        290                    295                    300

    Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser Gln Asp Ala Leu Ile
    305                    310                    315                    320

    Ala His Tyr Pro Arg Ile Tyr Asn Asp Asp Lys Asn Thr Tyr Ile Arg
                    325                    330                    335

    Tyr Glu Leu Asp Tyr Ile Leu
                340
```

```
<210> 1044
<211> 268
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1044
Leu Arg Arg Pro Tyr Ala Arg Tyr Asn Gly Leu Tyr Arg Ser Gly Ile
  1               5                  10                  15

Arg Gly Arg Xaa Asn Leu Glu Ser Thr Arg Val Arg Glu Leu Pro Gly
            20                  25                  30
```

1025

```
Gly Ala Met Ser Cys Ile Asn Leu Pro Thr Val Leu Pro Gly Ser Pro
         35              40              45

Ser Lys Thr Arg Gly Gln Ile Gln Val Ile Leu Gly Pro Met Phe Ser
     50              55              60

Gly Lys Ser Thr Glu Leu Met Arg Arg Val Arg Arg Phe Gln Ile Ala
65              70              75                          80

Gln Tyr Lys Cys Leu Val Ile Lys Tyr Ala Lys Asp Thr Arg Tyr Ser
             85              90                          95

Ser Ser Phe Cys Thr His Asp Arg Asn Thr Met Glu Ala Leu Pro Ala
             100             105             110

Cys Leu Leu Arg Asp Val Ala Gln Glu Ala Leu Gly Val Ala Val Ile
         115             120             125

Gly Ile Asp Glu Gly Gln Phe Phe Pro Asp Ile Val Glu Phe Cys Glu
     130             135             140

Ala Met Ala Asn Ala Gly Lys Thr Val Ile Val Ala Ala Leu Asp Gly
145             150             155             160

Thr Phe Gln Arg Lys Pro Phe Gly Ala Ile Leu Asn Leu Val Pro Leu
             165             170             175

Ala Glu Ser Val Val Lys Leu Thr Ala Val Cys Met Glu Cys Phe Arg
             180             185             190

Glu Ala Ala Tyr Thr Lys Arg Leu Gly Thr Glu Lys Glu Val Glu Val
         195             200             205

Ile Gly Gly Ala Asp Lys Tyr His Ser Val Cys Arg Leu Cys Tyr Phe
     210             215             220

Lys Lys Ala Ser Gly Gln Pro Ala Gly Pro Asp Asn Lys Glu Asn Cys
225             230             235             240

Pro Val Pro Gly Lys Pro Gly Glu Ala Val Ala Ala Arg Lys Leu Phe
             245             250             255

Ala Pro Gln Gln Ile Leu Gln Cys Ser Pro Ala Asn
             260             265
```

<210> 1045
<211> 139
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1045
Pro Gly Gln Ser Arg Trp Gln Gly Pro Pro Leu Pro Leu Cys Gln Ala
 1               5                  10                  15

Gly Ser Ala Lys Ser Gly Glu Pro Gly Ala Gly Gly Lys Ala Gly Asp
             20                  25                  30

Ser Pro Ala Leu Pro Pro Pro Leu Gly Ala Gln Gln Leu Leu Arg
         35                  40                  45

Lys Val Trp His Pro Trp Arg Gly Gly Ala Pro Gly Trp Ala Gly Ser
     50                  55                  60

Arg Trp Pro Gly Ala Trp Arg Cys Ala Ala Gly Ala Cys Met Ala Pro
 65                  70                  75                  80

Arg Gly Thr Gln Ala Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn
                 85                  90                  95

Ile Thr Gly Ala Arg Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln
             100                 105                 110

Val Gln Gly Glu Pro Pro Glu Val His Trp Leu Arg Asp Gly Gln Xaa
         115                 120                 125

Leu Glu Leu Ala Asp Ser Thr Gln Thr Gln Val
     130                 135


<210> 1046
<211> 416
<212> PRT
<213> Homo sapiens

<400> 1046
Ser Pro Ser Glu Arg Leu Gln Arg Gly Arg Glu Glu Gln Pro Ala Gly
 1               5                  10                  15

Gly Gly Gly Glu Ser Val Ser Ser Trp Glu Glu Gln Asn Arg Gly Gly
             20                  25                  30

Ala Pro Ala Gly Ala Gly Gly Gly Pro Thr Met Ala Ile Arg Lys Lys
         35                  40                  45
```

```
Ser Thr Lys Ser Pro Pro Val Leu Ser His Glu Phe Val Leu Gln Asn
    50              55              60

His Ala Asp Ile Val Ser Cys Val Ala Met Val Phe Leu Leu Gly Leu
65              70              75              80

Met Phe Glu Ile Thr Ala Lys Ala Ser Ile Ile Phe Val Thr Leu Gln
            85              90              95

Tyr Asn Val Thr Leu Pro Ala Thr Glu Glu Gln Ala Thr Glu Ser Val
            100             105             110

Ser Leu Tyr Tyr Tyr Gly Ile Lys Asp Leu Ala Thr Val Phe Phe Tyr
        115             120             125

Met Leu Val Ala Ile Ile Ile His Ala Val Ile Gln Glu Tyr Met Leu
    130             135             140

Asp Lys Ile Asn Arg Arg Met His Phe Ser Lys Thr Lys His Ser Lys
145             150             155             160

Phe Asn Glu Ser Gly Gln Leu Ser Ala Phe Tyr Leu Phe Ala Cys Val
            165             170             175

Trp Gly Thr Phe Ile Leu Ile Ser Glu Asn Tyr Ile Ser Asp Pro Thr
            180             185             190

Ile Leu Trp Arg Ala Tyr Pro His Asn Leu Met Thr Phe Gln Met Lys
        195             200             205

Phe Phe Tyr Ile Ser Gln Leu Ala Tyr Trp Leu His Ala Phe Pro Glu
    210             215             220

Leu Tyr Phe Gln Lys Thr Lys Lys Glu Asp Ile Pro Arg Gln Leu Val
225             230             235             240

Tyr Ile Gly Leu Tyr Leu Phe His Ile Ala Gly Ala Tyr Leu Leu Asn
            245             250             255

Leu Asn His Leu Gly Leu Val Leu Leu Val Leu His Tyr Phe Val Glu
            260             265             270

Phe Leu Phe His Ile Ser Arg Leu Phe Tyr Phe Ser Asn Glu Lys Tyr
        275             280             285

Gln Lys Gly Phe Ser Leu Trp Ala Val Leu Phe Val Leu Gly Arg Leu
    290             295             300

Leu Thr Leu Ile Leu Ser Val Leu Thr Val Gly Phe Gly Leu Ala Arg
305             310             315             320
```

1028

```
Ala Glu Asn Gln Lys Leu Asp Phe Ser Thr Gly Asn Phe Asn Val Leu
                325             330             335

Ala Val Arg Ile Ala Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe
                340             345             350

Met Met Trp Lys Phe Ile Asn Phe Gln Leu Arg Arg Trp Arg Glu His
                355             360             365

Ser Ala Phe Gln Ala Pro Ala Val Lys Lys Pro Thr Val Thr Lys
    370             375             380

Gly Arg Ser Ser Lys Lys Gly Thr Glu Asn Gly Val Asn Gly Thr Leu
385             390             395             400

Thr Ser Asn Val Ala Asp Ser Pro Arg Asn Lys Lys Glu Lys Ser Ser
                405             410             415
```

<210> 1047
<211> 466
<212> PRT
<213> Homo sapiens

<400> 1047
```
Pro Ala Ser Ser Gly Leu Leu Pro Leu Ser Arg Ser Asn Leu Tyr Ser
  1             5             10              15

Gly Arg Thr Gly Ile Pro Arg Ala Pro Pro Ala Leu Ala Ala Leu Ala
                20              25              30

Thr Ala Pro Gly Arg Arg Ala Pro Val His Thr Gly Ser Leu Leu Gly
            35              40              45

Thr Asn Ser Ser Thr Met Gly Leu Ala Trp Gly Leu Gly Val Leu Phe
    50              55              60

Leu Met His Val Cys Gly Thr Asn Arg Ile Pro Glu Ser Gly Gly Asp
65              70              75              80

Asn Ser Val Phe Asp Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly
                85              90              95

Ser Gly Arg Arg Leu Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe
            100             105             110

Arg Ile Glu Asp Ala Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe
```

1029

```
              115                 120                 125

    Gln Asp Leu Val Asp Ala Val Arg Ala Glu Lys Gly Phe Leu Leu Leu
        130             135             140

    Ala Ser Leu Arg Gln Met Lys Lys Thr Arg Gly Thr Leu Leu Ala Leu
    145             150             155             160

    Glu Arg Lys Asp His Ser Gly Gln Val Phe Ser Val Val Ser Asn Gly
                165             170             175

    Lys Ala Gly Thr Leu Asp Leu Ser Leu Thr Val Gln Gly Lys Gln His
                180             185             190

    Val Val Ser Val Glu Glu Ala Leu Leu Ala Thr Gly Gln Trp Lys Ser
            195             200             205

    Ile Thr Leu Phe Val Gln Glu Asp Arg Ala Gln Leu Tyr Ile Asp Cys
        210             215             220

    Glu Lys Met Glu Asn Ala Glu Leu Asp Val Pro Ile Gln Ser Val Phe
    225             230             235             240

    Thr Arg Asp Leu Ala Ser Ile Ala Arg Leu Arg Ile Ala Lys Gly Gly
                245             250             255

    Val Asn Asp Asn Phe Gln Gly Val Leu Gln Asn Val Arg Phe Val Phe
                260             265             270

    Gly Thr Thr Pro Glu Asp Ile Leu Arg Asn Lys Gly Cys Ser Ser Ser
            275             280             285

    Thr Ser Val Leu Leu Thr Leu Asp Asn Asn Val Val Asn Gly Ser Ser
        290             295             300

    Pro Ala Ile Arg Thr Asn Tyr Ile Gly His Lys Thr Lys Asp Leu Gln
    305             310             315             320

    Ala Ile Cys Gly Ile Ser Cys Asp Glu Leu Ser Ser Met Val Leu Glu
                325             330             335

    Leu Arg Gly Leu Arg Thr Ile Val Thr Thr Leu Gln Asp Ser Ile Arg
            340             345             350

    Lys Val Thr Glu Glu Asn Lys Glu Leu Ala Asn Glu Leu Arg Arg Pro
            355             360             365

    Pro Leu Cys Tyr His Asn Gly Val Gln Tyr Arg Asn Asn Glu Glu Trp
        370             375             380

    Thr Val Asp Ser Cys Thr Glu Cys His Cys Gln Asn Ser Val Thr Ile
```

1030

```
            385                 390                  395                  400

    Cys Lys Lys Val Ser Cys Pro Ile Met Pro Cys Ser Asn Ala Thr Val
                    405                 410                 415

    Pro Asp Gly Glu Cys Cys Pro Arg Cys Trp Pro Ser Asp Ser Ala Asp
                    420                 425                 430

    Asp Gly Trp Ser Pro Trp Ser Glu Trp Thr Ser Cys Ser Thr Ser Cys
                    435                 440                 445

    Gly Asn Gly Ile Gln Gln Arg Gly Arg Ser Cys Asp Ser Ala Gln Gln
            450                 455                 460

    Pro Met
    465
```

<210> 1048
<211> 217
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1048
```
Asp Pro Arg Val Arg Gln Ser His Ile Ser Asp Thr Ser Val Val Val
  1               5                  10                  15

Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp Cys Ile Ile Ala Glu
            20                  25                  30

Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg Ser Arg Ala Glu Ala
            35                  40                  45

Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met Lys Ala Thr Val Ile
    50                  55                  60
```

1031

```
Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu Glu Ile Asn Glu Leu
 65              70              75                  80

Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val Glu Asn Ala Lys Cys
                85              90                  95

Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln Ser Glu Gln Gln Gly
            100             105             110

Glu Ala Ala Leu Ser Asp Ala Arg Cys Xaa Leu Ala Glu Leu Glu Gly
        115             120             125

Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys Leu Ile Arg Glu Tyr
    130             135             140

Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr
145             150             155             160

Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg Leu Cys Glu Gly Ile
            165             170             175

Gly Ala Val Asn Val Cys Val Ser Ser Xaa Arg Gly Gly Val Val Cys
            180             185             190

Gly Asp Leu Cys Val Ser Gly Xaa Arg Pro Val Thr Ala Val Ser Ala
        195             200             205

Ala Leu Arg Ala Thr Gly Thr Trp Arg
    210             215
```

```
<210> 1049
<211> 406
<212> PRT
<213> Homo sapiens

<400> 1049
Gly Ser Ala Ala Ala Arg Tyr Leu Ser Ala Thr Trp Arg Asn Trp Ile
 1           5               10                  15

Ser Leu Pro Pro Ala Gly Leu Pro Ala Thr Ala Gly Leu Arg His Ser
            20              25              30

Gly Ser Leu Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn
        35              40              45

Tyr Phe Ser Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val
    50              55              60
```

Pro Pro Ala Ala Thr Phe Gly Ala Asp Asp Leu Val Leu Thr Leu Ser
65   70   75   80

Asn Pro Gln Met Ser Leu Glu Gly Thr Glu Lys Ala Ser Trp Leu Gly
            85   90   95

Glu Gln Pro Gln Phe Trp Ser Lys Thr Gln Val Leu Asp Trp Ile Ser
            100   105   110

Tyr Gln Val Glu Lys Asn Lys Tyr Asp Ala Ser Ala Ile Asp Phe Ser
        115   120   125

Arg Cys Asp Met Asp Gly Ala Thr Leu Cys Asn Cys Ala Leu Glu Glu
    130   135   140

Leu Arg Leu Val Phe Gly Pro Leu Gly Asp Gln Leu His Ala Gln Leu
145   150   155   160

Arg Asp Leu Thr Ser Ser Ser Asp Glu Leu Ser Trp Ile Ile Glu
            165   170   175

Leu Leu Glu Lys Asp Gly Met Ala Phe Gln Glu Ala Leu Asp Pro Gly
            180   185   190

Pro Phe Asp Gln Gly Ser Pro Phe Ala Gln Glu Leu Leu Asp Asp Gly
        195   200   205

Gln Gln Ala Ser Pro Tyr His Pro Gly Ser Cys Gly Ala Gly Ala Pro
    210   215   220

Ser Pro Gly Ser Ser Asp Val Ser Thr Ala Gly Thr Gly Ala Ser Arg
225   230   235   240

Ser Ser His Ser Ser Asp Ser Gly Gly Ser Asp Val Asp Leu Asp Pro
            245   250   255

Thr Asp Gly Lys Leu Phe Pro Ser Asp Gly Phe Arg Asp Cys Lys Lys
            260   265   270

Gly Asp Pro Lys His Gly Lys Arg Lys Arg Gly Arg Pro Arg Lys Leu
        275   280   285

Ser Lys Glu Tyr Trp Asp Cys Leu Glu Gly Lys Lys Ser Lys His Ala
    290   295   300

Pro Arg Gly Thr His Leu Trp Glu Phe Ile Arg Asp Ile Leu Ile His
305   310   315   320

Pro Glu Leu Asn Glu Gly Leu Met Lys Trp Glu Asn Arg His Glu Gly
            325   330   335

```
Val Phe Lys Phe Leu Arg Ser Glu Ala Val Ala Gln Leu Trp Gly Gln
        340                 345                 350

Lys Lys Lys Asn Ser Asn Met Thr Tyr Glu Lys Leu Ser Arg Ala Met
        355                 360                 365

Arg Tyr Tyr Tyr Lys Arg Glu Ile Leu Glu Arg Val Asp Gly Arg Arg
    370             375                 380

Leu Val Tyr Lys Phe Gly Lys Asn Ser Ser Gly Trp Lys Glu Glu Glu
385             390             395                 400

Val Leu Gln Ser Arg Asn
            405
```

```
<210> 1050
<211> 251
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1050
Arg Pro Ala Leu Asp Thr Cys Cys Pro Phe Pro Ala Arg Ile Leu Gly
  1             5                 10                  15

Ser Phe Pro Leu Ser Gln His Leu Gly Pro Ala Phe Asp Thr Thr Pro
            20                  25                  30

Arg Leu Pro Thr Leu Arg Ala Trp Ser Leu Pro Gln Gly Pro Leu Ser
        35                  40                  45

Trp Ala Met Ala Xaa Lys Gly Val Leu Gly Pro Gly Gln Leu Gly Ala
    50                  55                  60

Val Ala Ile Leu Leu Tyr Leu Gly Leu Leu Arg Ser Gly Thr Gly Ala
65                  70                  75                  80

Glu Gly Ala Glu Ala Xaa Cys Gly Val Ala Pro Gln Ala Arg Ile Thr
            85                  90                  95
```

```
Gly Gly Ser Ser Ala Val Ala Gly Gln Trp Pro Trp Gln Val Ser Ile
        100                 105                 110

Thr Tyr Glu Gly Val His Val Cys Gly Gly Ser Leu Val Ser Glu Gln
        115                 120                 125

Trp Val Leu Ser Ala Ala His Cys Phe Pro Ser Glu His His Lys Glu
    130                 135                 140

Ala Tyr Glu Val Lys Leu Gly Ala His Gln Leu Asp Ser Tyr Ser Glu
145                 150                 155                 160

Asp Ala Lys Val Ser Thr Leu Lys Asp Ile Ile Pro His Pro Ser Tyr
            165                 170                 175

Leu Gln Glu Gly Ser Gln Gly Asp Ile Ala Leu Leu Gln Leu Ser Arg
            180                 185                 190

Pro Ile Thr Phe Ser Arg Tyr Ile Arg Pro Ile Cys Leu Pro Ala Ala
            195                 200                 205

Asn Ala Ser Phe Pro Asn Gly Leu His Cys Thr Val Thr Gly Trp Gly
    210                 215                 220

His Val Ala Pro Ser Val Ser Leu Leu Thr Pro Lys Pro Leu Gln Gln
225                 230                 235                 240

Leu Glu Val Pro Leu Ile Ser Arg Glu Thr Trp
            245                 250


<210> 1051
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1051
His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Arg Gly Arg
1               5                   10                  15

Val Asp Ile Arg Arg Arg Ser Ser Arg Arg Pro Arg Glu Pro Pro Gly
            20                  25                  30

Pro Ser Arg Arg Arg Arg Arg Arg Pro Asp Pro Arg Thr Met Pro
        35                  40                  45

Ser Glu Lys Thr Phe Lys Gln Arg Arg Thr Phe Glu Gln Arg Val Glu
    50                  55                  60

Asp Val Arg Leu Ile Arg Glu Gln His Pro Thr Lys Ile Pro Val Ile
```

```
      65                      70                      75                      80

      Ile Glu Arg Tyr Lys Gly Glu Lys Gln Leu Pro Val Leu Asp Lys Thr
                      85                      90                      95


      Lys Phe Leu Val Pro Asp His Val Asn Met Ser Glu Leu Ile Lys Ile
                     100                     105                     110


      Ile Arg Arg Arg Leu Gln Leu Asn Ala Asn Gln Ala Phe Phe Leu Leu
                     115                     120                     125


      Val Asn Gly His Ser Met Val Ser Val Ser Thr Pro Ile Ser Glu Val
                 130                     135                     140


      Tyr Glu Ser Glu Lys Asp Glu Asp Gly Phe Leu Tyr Met Val Tyr Ala
      145                     150                     155                     160


      Ser Gln Glu Thr Phe Gly Met Lys Leu Ser Val
                     165                     170
```

<210> 1052
<211> 189
<212> PRT
<213> Homo sapiens

<400> 1052

```
      Gly Gly Pro Thr Cys Ser Ala Arg Cys Glu Pro Val Arg Pro Pro Pro
        1               5               10                      15


      Ala Pro Glu Gln Pro Ala Ser Leu His Arg Leu Leu Ser Val Leu Ser
                      20                      25                      30


      Pro Arg Ala Ala Ile Ala Val Met Leu Gly Ala Ala Leu Arg Arg Cys
                      35                      40                      45


      Ala Val Ala Ala Thr Thr Arg Ala Asp Pro Arg Gly Leu Leu His Ser
                  50                      55                      60


      Ala Arg Thr Pro Gly Pro Ala Val Ala Ile Gln Ser Val Arg Cys Tyr
      65                      70                      75                      80


      Ser His Gly Ser Gln Glu Thr Asp Glu Glu Phe Asp Ala Arg Trp Val
                      85                      90                      95


      Thr Tyr Phe Asn Lys Pro Asp Ile Asp Ala Trp Glu Leu Arg Lys Gly
                     100                     105                     110


      Ile Asn Thr Leu Val Thr Tyr Asp Met Val Pro Glu Pro Lys Ile Ile
                     115                     120                     125
```

```
Asp Ala Ala Leu Arg Ala Cys Arg Arg Leu Asn Asp Phe Ala Ser Thr
    130             135             140

Val Arg Ile Leu Glu Val Val Lys Asp Lys Ala Gly Pro His Lys Glu
145             150             155             160

Ile Tyr Pro Tyr Val Ile Gln Glu Leu Arg Pro Thr Leu Asn Glu Leu
            165             170             175

Gly Ile Ser Thr Pro Glu Glu Leu Gly Leu Asp Lys Val
            180             185
```

```
<210> 1053
<211> 315
<212> PRT
<213> Homo sapiens

<400> 1053
Arg His Ser Ala Ser Pro Arg Cys Arg Leu Pro Pro Thr Glu Pro Val
  1             5             10             15

Ser Gly Leu Arg Ala Ser Gly Glu Met Leu Leu Pro Leu Leu Leu Leu
            20             25             30

Leu Pro Met Cys Trp Ala Val Glu Val Lys Arg Pro Arg Gly Val Ser
        35             40             45

Leu Thr Asn His His Phe Tyr Asp Glu Ser Lys Pro Phe Thr Cys Leu
    50             55             60

Asp Gly Ser Ala Thr Ile Pro Phe Asp Gln Val Asn Asp Asp Tyr Cys
65             70             75             80

Asp Cys Lys Asp Gly Ser Asp Glu Pro Gly Thr Ala Ala Cys Pro Asn
            85             90             95

Gly Ser Phe His Cys Thr Asn Thr Gly Tyr Lys Pro Leu Tyr Ile Pro
            100             105             110

Ser Asn Arg Val Asn Asp Gly Val Cys Asp Cys Cys Asp Gly Thr Asp
        115             120             125

Glu Tyr Asn Ser Gly Val Ile Cys Glu Asn Thr Cys Lys Glu Lys Gly
    130             135             140

Arg Lys Glu Arg Glu Ser Leu Gln Gln Met Ala Glu Val Thr Arg Glu
145             150             155             160
```

```
Gly Phe Arg Leu Lys Lys Ile Leu Ile Glu Asp Trp Lys Lys Ala Arg
            165             170             175

Glu Glu Lys Gln Lys Lys Leu Ile Glu Leu Gln Ala Gly Lys Lys Ser
            180             185             190

Leu Glu Asp Gln Val Glu Met Leu Arg Thr Val Lys Glu Glu Ala Glu
            195             200              205

Lys Pro Glu Arg Glu Ala Lys Glu Gln His Gln Lys Leu Trp Glu Glu
    210             215             220

Gln Leu Ala Ala Ala Lys Ala Gln Gln Glu Gln Glu Leu Ala Ala Asp
225             230             235             240

Ala Phe Lys Glu Leu Asp Asp Asp Met Asp Gly Thr Val Ser Val Thr
            245             250             255

Glu Leu Gln Thr His Pro Glu Leu Asp Thr Asp Gly Asp Gly Ala Leu
            260             265             270

Ser Glu Ala Glu Ala Gln Ala Leu Leu Ser Gly Asp Thr Gln Thr Asp
            275             280             285

Ala Thr Ser Phe Tyr Asp Arg Val Trp Gly Pro Gly Gly Ala Gly Pro
    290             295             300

His Ser Gln Ala Pro Thr Ala Phe Lys Asp Gly
305             310             315
```

```
<210> 1054
<211> 138
<212> PRT
<213> Homo sapiens

<400> 1054
Val Trp Lys Val Ile Val Trp Ser His Ser Ser Leu Ile Thr Leu Leu
    1           5               10              15

Gly Ile Leu Glu Glu Lys Gly Ser Lys Thr Tyr Thr His Thr Pro Thr
            20              25              30

Gln Ser Asn Ser Val Phe Lys Gln Ile Pro Arg Ile Leu Gly Pro Gly
            35              40              45

Leu Asn Lys Ala Gly Lys Phe Pro Ser Leu Leu Thr His Asn Glu Asn
    50              55              60

Met Val Ala Lys Val Asp Glu Val Lys Ser Thr Ile Lys Phe Gln Met
```

1038

```
        65                    70                    75                    80

    Lys Lys Val Leu Cys Leu Ala Val Ala Val Gly His Val Lys Met Thr
                    85                    90                    95

    Asp Asp Glu Leu Val Tyr Asn Ile His Leu Ala Val Asn Phe Leu Val
                   100                   105                   110

    Ser Leu Leu Lys Lys Asn Trp Gln Asn Val Arg Ala Leu Tyr Ile Lys
                   115                   120                   125

    Ser Thr Met Gly Lys Pro Gln Arg Leu Tyr
                   130                   135
```

<210> 1055
<211> 243
<212> PRT
<213> Homo sapiens

<400> 1055
```
    Gly Thr Arg Glu Glu Ala Gly Val Asp Leu Val Ser Pro Thr Pro Leu
     1               5                   10                   15

    Thr Pro Pro Asp Pro Gly Ala Ala Ser Ala Thr Ala Thr Ala Pro Ala
                    20                   25                   30

    Pro Ala Ala Ala Arg Arg Gly Glu Ala Met Ala Lys Val Ser Val Leu
                   35                   40                   45

    Asn Val Ala Val Leu Glu Asn Pro Ser Pro Phe His Ser Pro Phe Arg
        50                   55                   60

    Phe Glu Ile Ser Phe Glu Cys Ser Glu Ala Leu Ala Asp Asp Leu Glu
    65                   70                   75                   80

    Trp Lys Ile Ile Tyr Val Gly Ser Ala Glu Ser Glu Glu Phe Asp Gln
                    85                   90                   95

    Ile Leu Asp Ser Val Leu Val Gly Pro Val Pro Ala Gly Arg His Met
                   100                   105                   110

    Phe Val Phe Gln Ala Asp Ala Pro Asn Pro Ser Leu Ile Pro Glu Thr
                   115                   120                   125

    Asp Ala Val Gly Val Thr Val Val Leu Ile Thr Cys Thr Tyr His Gly
        130                   135                   140

    Gln Glu Phe Ile Arg Val Gly Tyr Tyr Val Asn Asn Glu Tyr Leu Asn
    145                   150                   155                   160
```

```
Pro Glu Leu Arg Glu Asn Pro Pro Met Lys Pro Asp Phe Ser Gln Leu
            165                 170                 175

Gln Arg Asn Ile Leu Ala Ser Asn Pro Arg Val Thr Arg Phe His Ile
            180                 185                 190

Asn Trp Asp Asn Asn Met Asp Arg Leu Glu Ala Ile Glu Thr Gln Asp
            195                 200                 205

Pro Ser Leu Gly Cys Gly Leu Pro Leu Asn Cys Thr Pro Ile Lys Gly
    210                 215                 220

Leu Gly Leu Pro Gly Cys Ile Pro Gly Leu Leu Pro Glu Asn Ser Met
225                 230                 235                 240

Asp Cys Ile
```

<210> 1056
<211> 211
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1056
```
His Glu Pro Arg Arg Leu Leu Xaa Asp Ala Glu Gly Pro Glu Glu Thr
  1           5               10                  15

Val Arg Leu Trp Pro Ala Ala Arg Ala Ala Met Asp Ala Ala Glu Val
            20                  25                  30

Glu Phe Leu Ala Glu Lys Glu Leu Val Thr Ile Ile Pro Asn Phe Ser
            35                  40                  45

Leu Asp Lys Ile Tyr Leu Ile Gly Gly Asp Leu Gly Pro Phe Asn Pro
    50                  55                  60

Gly Leu Pro Val Glu Val Pro Leu Trp Leu Ala Ile Asn Leu Lys Gln
65                  70                  75                  80

Arg Gln Lys Cys Arg Leu Leu Pro Pro Glu Trp Met Asp Val Glu Lys
                85                  90                  95

Leu Glu Lys Met Arg Asp His Glu Arg Lys Glu Glu Thr Phe Thr Pro
```

1040

```
                 100                  105                  110

Met Pro Ser Pro Tyr Tyr Met Glu Leu Thr Lys Leu Leu Leu Asn His
        115                 120                 125

Ala Ser Asp Asn Ile Pro Lys Ala Asp Glu Ile Arg Thr Leu Val Lys
        130                 135                 140

Asp Met Trp Asp Thr Arg Ile Ala Lys Leu Arg Val Ser Ala Asp Ser
145                 150                 155                 160

Phe Val Arg Gln Gln Glu Ala His Ala Lys Leu Asp Asn Leu Thr Leu
                165                 170                 175

Met Glu Ile Asn Thr Ser Gly Thr Phe Leu Thr Gln Ala Leu Asn His
                180                 185                 190

Met Tyr Lys Leu Arg Thr Asn Leu Gln Pro Leu Glu Ser Thr Gln Ser
        195                 200                 205

Gln Asp Phe
    210
```

```
<210> 1057
<211> 407
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (343)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1057
Val Ile Leu Gly Ala Gly Leu Arg Asp Lys Asp Met Trp Ile Pro Val
  1               5                  10                  15

Val Gly Leu Pro Arg Arg Leu Arg Leu Ser Ala Leu Ala Gly Ala Gly
            20                  25                  30

Arg Phe Cys Ile Leu Gly Ser Glu Ala Ala Thr Arg Lys His Leu Pro
            35                  40                  45

Ala Arg Asn His Cys Gly Leu Ser Asp Ser Ser Pro Gln Leu Trp Pro
        50                  55                  60

Glu Pro Asp Phe Arg Asn Pro Pro Arg Lys Ala Ser Lys Ala Ser Leu
65                  70                  75                  80
```

```
Asp Phe Lys Arg Tyr Val Thr Asp Arg Arg Leu Ala Glu Thr Leu Ala
            85                  90                  95

Gln Ile Tyr Leu Gly Lys Pro Ser Arg Pro Pro His Leu Leu Leu Glu
            100             105                 110

Cys Asn Pro Gly Pro Gly Ile Leu Thr Gln Ala Leu Leu Glu Ala Gly
        115                 120                 125

Ala Lys Val Val Ala Leu Glu Ser Asp Lys Thr Phe Ile Pro His Leu
    130             135                 140

Glu Ser Leu Gly Lys Asn Leu Asp Gly Lys Leu Arg Val Ile His Cys
145             150                 155                 160

Asp Phe Phe Lys Leu Asp Pro Arg Ser Gly Gly Val Ile Lys Pro Pro
            165                 170                 175

Ala Met Ser Ser Arg Gly Leu Phe Lys Asn Leu Gly Ile Glu Ala Val
            180                 185                 190

Pro Trp Thr Ala Asp Ile Pro Leu Lys Val Val Gly Met Phe Pro Ser
        195                 200                 205

Arg Gly Glu Lys Arg Ala Leu Trp Lys Leu Ala Tyr Asp Leu Tyr Ser
    210             215                 220

Cys Thr Ser Ile Tyr Lys Phe Gly Arg Ile Glu Val Asn Met Phe Ile
225             230                 235                 240

Gly Glu Lys Glu Phe Gln Lys Leu Met Ala Asp Pro Gly Asn Pro Asp
            245                 250                 255

Leu Tyr His Val Leu Ser Val Ile Trp Gln Leu Ala Cys Glu Ile Lys
            260                 265                 270

Val Leu His Met Glu Pro Trp Ser Ser Phe Asp Ile Tyr Thr Arg Lys
        275                 280                 285

Gly Pro Leu Glu Asn Pro Lys Arg Arg Glu Leu Leu Asp Gln Leu Gln
    290                 295                 300

Gln Lys Leu Tyr Leu Ile Gln Met Ile Pro Arg Gln Asn Leu Phe Thr
305             310                 315                 320

Lys Asn Leu Thr Pro Met Asn Tyr Asn Ile Phe Phe His Leu Leu Lys
            325                 330                 335

His Cys Phe Gly Arg Arg Xaa Ala Thr Val Ile Asp His Leu Arg Ser
            340                 345                 350
```

Leu Thr Pro Leu Asp Ala Arg Asp Ile Leu Met Gln Ile Gly Lys Gln
        355   360   365

Glu Asp Glu Lys Val Val Asn Met His Pro Gln Asp Phe Lys Thr Leu
        370   375   380

Phe Glu Thr Ile Glu Arg Ser Lys Asp Cys Ala Tyr Lys Trp Leu Tyr
385   390   395   400

Asp Glu Thr Leu Glu Asp Arg
                405

<210> 1058
<211> 89
<212> PRT
<213> Homo sapiens

<400> 1058
Ser Ser Trp Val Gly Gly Ser Leu Arg Gln Ala Ala Thr Leu Glu Gly
  1   5   10   15

Glu Gln Gly Ser Ala Val Ser Ala Ala Ser His Ala Arg Ser Asp Leu
            20   25   30

Ser Leu Gly Thr Pro Gln Glu Pro Glu Asp Ser Ser Gly Gln Cys Arg
        35   40   45

Trp Gly Val Gly Gly Glu Ser Gly Arg Glu Ala Leu Arg Ala Pro Ser
    50   55   60

Pro Thr Thr Asn Leu Ala Leu Val Val Ile Phe Arg Gln Asn Phe Val
    65   70   75   80

Val Phe Phe Pro Phe Tyr Asp Gly Phe
                85

<210> 1059
<211> 457
<212> PRT
<213> Homo sapiens

<400> 1059
Gly Thr Arg Pro Ser Ser Cys Ser Gln Thr Glu Ala Gln Pro Pro Ser
  1   5   10   15

Pro Val Ser Ile Thr Ser Ala Ala Ser Met Ser Asp Lys Leu Pro Tyr
            20   25   30

1043

Lys Val Ala Asp Ile Gly Leu Ala Ala Trp Gly Arg Lys Ala Leu Asp
        35   40   45

Ile Ala Glu Asn Glu Met Pro Gly Leu Met Arg Met Arg Glu Arg Tyr
    50   55   60

Ser Ala Ser Lys Pro Leu Lys Gly Ala Arg Ile Ala Gly Cys Leu His
65   70   75   80

Met Thr Val Glu Thr Ala Val Leu Ile Glu Thr Leu Val Thr Leu Gly
                85   90   95

Ala Glu Val Gln Trp Ser Ser Cys Asn Ile Phe Ser Thr Gln Asp His
            100   105   110

Ala Ala Ala Ala Ile Ala Lys Ala Gly Ile Pro Val Tyr Ala Trp Lys
        115   120   125

Gly Glu Thr Asp Glu Glu Tyr Leu Trp Cys Ile Glu Gln Thr Leu Tyr
    130   135   140

Phe Lys Asp Gly Pro Leu Asn Met Ile Leu Asp Asp Gly Gly Asp Leu
145   150   155   160

Thr Asn Leu Ile His Thr Lys Tyr Pro Gln Leu Leu Pro Gly Ile Arg
            165   170   175

Gly Ile Ser Glu Glu Thr Thr Thr Gly Val His Asn Leu Tyr Lys Met
        180   185   190

Met Ala Asn Gly Ile Leu Lys Val Pro Ala Ile Asn Val Asn Asp Ser
    195   200   205

Val Thr Lys Ser Lys Phe Asp Asn Leu Tyr Gly Cys Arg Glu Ser Leu
    210   215   220

Ile Asp Gly Ile Lys Arg Ala Thr Asp Val Met Ile Ala Gly Lys Val
225   230   235   240

Ala Val Val Ala Gly Tyr Gly Asp Val Gly Lys Gly Cys Ala Gln Ala
            245   250   255

Leu Arg Gly Phe Gly Ala Arg Val Ile Ile Thr Glu Ile Asp Pro Ile
        260   265   270

Asn Ala Leu Gln Ala Ala Met Glu Gly Tyr Glu Val Thr Thr Met Asp
    275   280   285

Glu Ala Cys Gln Glu Gly Asn Ile Phe Val Thr Thr Thr Gly Cys Ile
290   295   300

1044

```
Asp Ile Ile Leu Gly Arg His Phe Glu Gln Met Lys Asp Asp Ala Ile
305             310             315             320

Val Cys Asn Ile Gly His Phe Asp Val Glu Ile Asp Val Lys Trp Leu
            325             330             335

Asn Glu Asn Ala Val Glu Lys Val Asn Ile Lys Pro Gln Val Asp Arg
            340             345             350

Tyr Arg Leu Lys Asn Gly Arg Arg Ile Ile Leu Leu Ala Glu Gly Arg
            355             360             365

Leu Val Asn Leu Gly Cys Ala Met Gly His Pro Ser Phe Val Met Ser
    370             375             380

Asn Ser Phe Thr Asn Gln Val Met Ala Gln Ile Glu Leu Trp Thr His
385             390             395             400

Pro Asp Lys Tyr Pro Val Gly Val His Phe Leu Pro Lys Lys Leu Asp
            405             410             415

Glu Ala Val Ala Glu Ala His Leu Gly Lys Leu Asn Val Lys Leu Thr
            420             425             430

Lys Leu Thr Glu Lys Gln Ala Gln Tyr Leu Gly Met Ser Cys Asp Gly
        435             440             445

Pro Phe Lys Pro Asp His Tyr Arg Tyr
    450             455
```

```
<210> 1060
<211> 511
<212> PRT
<213> Homo sapiens

<400> 1060
Glu Gly Val Met Ala Asp Gly Gln Val Ala Glu Leu Leu Leu Arg Arg
    1           5               10              15

Leu Glu Ala Ser Asp Gly Gly Leu Asp Ser Ala Glu Leu Ala Ala Glu
            20              25              30

Leu Gly Met Glu His Gln Ala Val Val Gly Ala Val Lys Ser Leu Gln
        35              40              45

Ala Leu Gly Glu Val Ile Glu Ala Glu Leu Arg Ser Thr Lys His Trp
    50              55              60
```

```
Glu Leu Thr Ala Glu Gly Glu Glu Ile Ala Arg Glu Gly Ser His Glu
65              70              75              80

Ala Arg Val Phe Arg Ser Ile Pro Pro Glu Gly Leu Ala Gln Ser Glu
                85              90              95

Leu Met Arg Leu Pro Ser Gly Lys Val Gly Phe Ser Lys Ala Met Ser
            100             105             110

Asn Lys Trp Ile Arg Val Asp Lys Ser Ala Ala Asp Gly Pro Arg Val
            115             120             125

Phe Arg Val Val Asp Ser Met Glu Asp Glu Val Gln Arg Arg Leu Gln
    130             135             140

Leu Val Arg Gly Gly Gln Ala Glu Lys Leu Gly Glu Lys Glu Arg Ser
145             150             155             160

Glu Leu Arg Lys Arg Lys Leu Leu Ala Glu Val Thr Leu Lys Thr Tyr
            165             170             175

Trp Val Ser Lys Gly Ser Ala Phe Ser Thr Ser Ile Ser Lys Gln Glu
            180             185             190

Thr Glu Leu Ser Pro Glu Met Ile Ser Ser Gly Ser Trp Arg Asp Arg
            195             200             205

Pro Phe Lys Pro Tyr Asn Phe Leu Ala His Gly Val Leu Pro Asp Ser
    210             215             220

Gly His Leu His Pro Leu Leu Lys Val Arg Ser Gln Phe Arg Gln Ile
225             230             235             240

Phe Leu Glu Met Gly Phe Thr Glu Met Pro Thr Asp Asn Phe Ile Glu
            245             250             255

Ser Ser Phe Trp Asn Phe Asp Ala Leu Phe Gln Pro Gln Gln His Pro
            260             265             270

Ala Arg Asp Gln His Asp Thr Phe Phe Leu Arg Asp Pro Ala Glu Ala
    275             280             285

Leu Gln Leu Pro Met Asp Tyr Val Gln Arg Val Lys Arg Thr His Ser
    290             295             300

Gln Gly Gly Tyr Gly Ser Gln Gly Tyr Lys Tyr Asn Trp Lys Leu Asp
305             310             315             320

Glu Ala Arg Lys Asn Leu Leu Arg Thr His Thr Thr Ser Ala Ser Ala
            325             330             335
```

```
Arg Ala Leu Tyr Arg Leu Ala Gln Lys Lys Pro Phe Thr Pro Val Lys
            340             345             350

Tyr Phe Ser Ile Asp Arg Val Phe Arg Asn Glu Thr Leu Asp Ala Thr
            355             360             365

His Leu Ala Glu Phe His Gln Ile Glu Gly Val Val Ala Asp His Gly
    370             375             380

Leu Thr Leu Gly His Leu Met Gly Val Leu Arg Glu Phe Phe Thr Lys
385             390             395             400

Leu Gly Ile Thr Gln Leu Arg Phe Lys Pro Ala Tyr Asn Pro Tyr Thr
            405             410             415

Glu Pro Ser Met Glu Val Phe Ser Tyr His Gln Gly Leu Lys Lys Trp
            420             425             430

Val Glu Val Gly Asn Ser Gly Val Phe Arg Pro Glu Met Leu Leu Pro
            435             440             445

Met Gly Leu Pro Glu Asn Val Ser Val Ile Ala Trp Gly Leu Ser Leu
    450             455             460

Glu Arg Pro Thr Met Ile Lys Tyr Gly Ile Asn Asn Ile Arg Glu Leu
465             470             475             480

Val Gly His Lys Val Asn Leu Gln Met Val Tyr Asp Ser Pro Leu Cys
            485             490             495

Arg Leu Asp Ala Glu Pro Arg Pro Pro Thr Gln Glu Ala Ala
            500             505             510
```

<210> 1061
<211> 228
<212> PRT
<213> Homo sapiens

<400> 1061
```
Arg Ala Ala Ser Thr Pro Arg Ala Ala Pro Gly Ala Ala Leu Leu Ser
 1           5               10              15

Pro Pro Gly Leu Arg Ala Ala Pro Ala Ala Leu Val Met Gly Glu Gly
            20              25              30

Thr Cys Glu Lys Arg Arg Asp Ala Glu Tyr Gly Ala Ser Pro Glu Gln
            35              40              45

Val Ala Asp Asn Gly Asp Asp His Ser Glu Gly Gly Leu Val Glu Asn
```

1047

```
          50                    55                     60

His Val Asp Ser Thr Met Asn Met Leu Gly Gly Gly Gly Ser Ala Gly
65                  70                 75                  80

Arg Lys Pro Leu Lys Ser Gly Met Lys Glu Leu Ala Val Phe Arg Glu
                85                 90                  95

Lys Val Thr Glu Gln His Arg Gln Met Gly Lys Gly Gly Lys His His
            100                105                 110

Leu Gly Leu Glu Glu Pro Lys Lys Leu Arg Pro Pro Ala Arg Thr
            115                120                 125

Pro Cys Gln Gln Glu Leu Asp Gln Val Leu Glu Arg Ile Ser Thr Met
        130                135                 140

Arg Leu Pro Asp Glu Arg Gly Pro Leu Glu His Leu Tyr Ser Leu His
145                150                155                 160

Ile Pro Asn Cys Asp Lys His Gly Leu Tyr Asn Leu Lys Gln Cys Lys
                165                170                 175

Met Ser Leu Asn Gly Gln Arg Gly Glu Cys Trp Cys Val Asn Pro Asn
            180                185                 190

Thr Gly Lys Leu Ile Gln Gly Ala Pro Thr Ile Arg Gly Asp Pro Glu
            195                200                 205

Cys His Leu Phe Tyr Asn Glu Gln Gln Glu Ala Arg Gly Val His Thr
        210                215                 220

Gln Arg Met Gln
225
```

<210> 1062
<211> 324
<212> PRT
<213> Homo sapiens

<400> 1062
```
Pro Arg Val Met Ala Met Ala Thr Lys Gly Gly Thr Val Lys Ala Ala
    1                 5                 10                  15

Ser Gly Phe Asn Ala Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met
                20                 25                  30

Lys Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr
            35                 40                  45
```

1048

```
Arg Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala Tyr Lys Ser Thr
    50              55              60

Ile Gly Arg Asp Leu Ile Asp Asp Leu Lys Ser Glu Leu Ser Gly Asn
    65              70              75              80

Phe Glu Gln Val Ile Val Gly Met Met Thr Pro Thr Val Leu Tyr Asp
                85              90              95

Val Gln Glu Leu Arg Arg Ala Met Lys Gly Ala Gly Thr Asp Glu Gly
            100             105             110

Cys Leu Ile Glu Ile Leu Ala Ser Arg Thr Pro Glu Glu Ile Arg Arg
        115             120             125

Ile Ser Gln Thr Tyr Gln Gln Gln Tyr Gly Arg Ser Leu Glu Asp Asp
    130             135             140

Ile Arg Ser Asp Thr Ser Phe Met Phe Gln Arg Val Leu Val Ser Leu
145             150             155             160

Ser Ala Gly Gly Arg Asp Glu Gly Asn Tyr Leu Asp Asp Ala Leu Val
            165             170             175

Arg Gln Asp Ala Gln Asp Leu Tyr Glu Ala Gly Glu Lys Lys Trp Gly
        180             185             190

Thr Asp Glu Val Lys Phe Leu Thr Val Leu Cys Ser Arg Asn Arg Asn
        195             200             205

His Leu Leu His Val Phe Asp Glu Tyr Lys Arg Ile Ser Gln Lys Asp
    210             215             220

Ile Glu Gln Ser Ile Lys Ser Glu Thr Ser Gly Ser Phe Glu Asp Ala
225             230             235             240

Leu Leu Ala Ile Val Lys Cys Met Arg Asn Lys Ser Ala Tyr Phe Ala
            245             250             255

Glu Lys Leu Tyr Lys Ser Met Lys Gly Leu Gly Thr Asp Asp Asn Thr
            260             265             270

Leu Ile Arg Val Met Val Ser Arg Ala Glu Ile Asp Met Leu Asp Ile
        275             280             285

Arg Ala His Phe Lys Arg Leu Tyr Gly Lys Ser Leu Tyr Ser Phe Ile
    290             295             300

Lys Gly Asp Thr Ser Gly Asp Tyr Arg Lys Val Leu Leu Val Leu Cys
305             310             315             320
```

Gly Gly Asp Asp

<210> 1063
<211> 355
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1063
Xaa Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Lys Ile Leu Gly
  1   5   10   15

Ser Gly Ile Ser Ser Ser Ser Val Leu His Gly Met Val Phe Lys Lys
            20   25   30

Glu Thr Glu Val Xaa Val Thr Ser Val Lys Asp Ala Lys Ile Ala Val
        35   40   45

Tyr Ser Cys Pro Phe Asp Gly Met Ile Thr Glu Thr Lys Gly Thr Val
    50   55   60

Leu Ile Lys Thr Ala Glu Glu Leu Met Asn Phe Ser Lys Gly Glu Glu
 65   70   75   80

Asn Leu Met Asp Ala Gln Val Lys Ala Ile Ala Asp Thr Gly Ala Asn
                85   90   95

Val Val Val Thr Gly Gly Lys Val Ala Asp Met Ala Leu His Tyr Ala
                100   105   110

Asn Lys Tyr Asn Ile Met Leu Val Arg Leu Asn Ser Lys Trp Asp Leu
            115   120   125

1050

```
Arg Arg Leu Cys Lys Thr Val Gly Ala Thr Ala Leu Pro Arg Leu Thr
    130             135             140
Pro Pro Val Leu Glu Glu Met Gly His Cys Asp Ser Val Tyr Leu Ser
145             150             155             160
Glu Val Gly Asp Thr Gln Val Val Val Phe Lys His Glu Lys Glu Asp
                165             170             175
Gly Ala Ile Ser Thr Ile Val Leu Arg Gly Ser Thr Asp Asn Leu Met
                180             185                 190
Asp Asp Ile Glu Arg Ala Val Asp Asp Gly Val Asn Thr Phe Lys Val
            195             200             205
Leu Thr Arg Asp Lys Arg Leu Val Pro Gly Gly Gly Ala Thr Glu Ile
    210             215             220
Glu Leu Ala Lys Gln Ile Thr Ser Tyr Gly Glu Thr Cys Pro Gly Leu
225             230             235             240
Glu Gln Tyr Ala Ile Lys Lys Phe Ala Glu Ala Phe Glu Ala Ile Pro
                245             250             255
Arg Ala Leu Ala Glu Asn Ser Gly Val Lys Ala Asn Glu Val Ile Ser
            260             265             270
Lys Leu Tyr Ala Val His Gln Glu Gly Asn Lys Asn Val Gly Leu Asp
            275             280             285
Ile Glu Ala Glu Val Pro Ala Val Lys Asp Met Leu Glu Ala Gly Ile
    290             295             300
Leu Asp Thr Tyr Leu Gly Lys Tyr Trp Ala Ile Lys Leu Ala Thr Asn
305             310             315             320
Ala Ala Val Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys Pro
                325             330             335
Ala Gly Gly Pro Lys Pro Pro Ser Gly Lys Lys Asp Trp Asp Asp Asp
            340             345             350
Gln Asn Asp
            355
```

```
<210> 1064
<211> 113
<212> PRT
<213> Homo sapiens
```

<400> 1064
Ser Pro Phe Thr Leu His Cys Cys His Ser Thr Leu Tyr Asp Gly Arg
 1   5   10   15

Thr Gly Ser Ser Arg Glu Asn Cys Thr Val Thr Thr Val Phe Phe Thr
             20   25   30

Leu Phe Gln Gly Ser Leu Ser Pro Asp Ile Glu Glu Ile Ser Phe Arg
         35   40   45

Pro Glu Thr Gln Arg Pro His Ser Pro Val Ile Lys Pro Arg Phe His
         50   55   60

Ser Gly Pro Arg Ser Gly Ala Trp Pro Leu Leu Phe Gly Ser His Trp
 65   70   75   80

Glu Ala His Trp Pro Trp Ile Ile Ser Ser Cys Thr Pro Gly Val Leu
                 85   90   95

Pro Ala Cys Leu Leu Ser Trp Thr Ala Val Cys Lys Lys Val Thr Lys
             100   105   110

Thr

<210> 1065
<211> 634
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (325)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1065
Val Gln Gly Phe Glu Ser Ala Thr Phe Leu Gly Tyr Phe Lys Ser Gly
 1   5   10   15

Leu Lys Tyr Lys Lys Gly Gly Val Ala Ser Gly Phe Lys His Val Val
             20   25   30

Pro Asn Glu Val Val Val Gln Arg Leu Phe Gln Val Lys Gly Arg Arg
         35   40   45

Val Val Arg Ala Thr Glu Val Pro Val Ser Trp Glu Ser Phe Asn Asn
         50   55   60

1052

```
Gly Asp Cys Phe Ile Leu Asp Leu Gly Asn Asn Ile His Gln Trp Cys
65              70              75                      80

Gly Ser Asn Ser Asn Arg Tyr Glu Arg Leu Lys Ala Thr Gln Val Ser
                85              90                      95

Lys Gly Ile Arg Asp Asn Glu Arg Ser Gly Arg Ala Arg Val His Val
            100             105             110

Ser Glu Glu Gly Thr Glu Pro Glu Ala Met Leu Gln Val Leu Gly Pro
        115             120             125

Lys Pro Ala Leu Pro Ala Gly Thr Glu Asp Thr Ala Lys Glu Asp Ala
    130             135             140

Ala Asn Arg Lys Leu Ala Lys Leu Tyr Lys Val Ser Asn Gly Ala Gly
145             150             155             160

Thr Met Ser Val Ser Leu Val Ala Asp Glu Asn Pro Phe Ala Gln Gly
            165             170             175

Ala Leu Lys Ser Glu Asp Cys Phe Ile Leu Asp His Gly Lys Asp Gly
        180             185             190

Lys Ile Phe Val Trp Lys Gly Lys Gln Ala Asn Thr Glu Glu Arg Lys
        195             200             205

Ala Ala Leu Lys Thr Ala Ser Asp Phe Ile Thr Lys Met Asp Tyr Pro
    210             215             220

Lys Gln Thr Gln Val Ser Val Leu Pro Glu Gly Gly Glu Thr Pro Leu
225             230             235             240

Phe Lys Gln Phe Phe Lys Asn Trp Arg Asp Pro Asp Gln Thr Asp Gly
            245             250             255

Leu Gly Leu Ser Tyr Leu Ser Ser His Ile Ala Asn Val Glu Arg Val
            260             265             270

Pro Phe Asp Ala Ala Thr Leu His Thr Ser Thr Ala Met Ala Ala Gln
        275             280             285

His Gly Met Asp Asp Asp Gly Thr Gly Gln Lys Gln Ile Trp Arg Ile
    290             295             300

Glu Gly Ser Asn Lys Val Pro Val Asp Pro Ala Thr Tyr Gly Gln Phe
305             310             315             320

Tyr Gly Gly Asp Xaa Tyr Ile Ile Leu Tyr Asn Tyr Arg His Gly Gly
            325             330             335
```

1053

```
Arg Gln Gly Gln Ile Ile Tyr Asn Trp Gln Gly Ala Gln Ser Thr Gln
        340             345         350

Asp Glu Val Ala Ala Ser Ala Ile Leu Thr Ala Gln Leu Asp Glu Glu
        355             360         365

Leu Gly Gly Thr Pro Val Gln Ser Arg Val Val Gln Gly Lys Glu Pro
    370             375         380

Ala His Leu Met Ser Leu Phe Gly Gly Lys Pro Met Ile Ile Tyr Lys
385             390             395             400

Gly Gly Thr Ser Arg Glu Gly Gly Gln Thr Ala Pro Ala Ser Thr Arg
            405             410             415

Leu Phe Gln Val Arg Ala Asn Ser Ala Gly Ala Thr Arg Ala Val Glu
        420             425             430

Val Leu Pro Lys Ala Gly Ala Leu Asn Ser Asn Asp Ala Phe Val Leu
        435             440             445

Lys Thr Pro Ser Ala Ala Tyr Leu Trp Val Gly Thr Gly Ala Ser Glu
    450             455             460

Ala Glu Lys Thr Gly Ala Gln Glu Leu Leu Arg Val Leu Arg Ala Gln
465             470             475             480

Pro Val Gln Val Ala Glu Gly Ser Glu Pro Asp Gly Phe Trp Glu Ala
            485             490             495

Leu Gly Gly Lys Ala Ala Tyr Arg Thr Ser Pro Arg Leu Lys Asp Lys
            500             505             510

Lys Met Asp Ala His Pro Pro Arg Leu Phe Ala Cys Ser Asn Lys Ile
        515             520             525

Gly Arg Phe Val Ile Glu Glu Val Pro Gly Glu Leu Met Gln Glu Asp
    530             535             540

Leu Ala Thr Asp Asp Val Met Leu Leu Asp Thr Trp Asp Gln Val Phe
545             550             555             560

Val Trp Val Gly Lys Asp Ser Gln Glu Glu Glu Lys Thr Glu Ala Leu
            565             570             575

Thr Ser Ala Lys Arg Tyr Ile Glu Thr Asp Pro Ala Asn Arg Asp Arg
            580             585             590

Arg Thr Pro Ile Thr Val Val Lys Gln Gly Phe Glu Pro Pro Ser Phe
        595             600             605
```

```
Val Gly Trp Phe Leu Gly Trp Asp Asp Asp Tyr Trp Ser Val Asp Pro
    610             615.            620

Leu Asp Arg Ala Met Ala Glu Leu Ala Ala
625             630
```

<210> 1066
<211> 117
<212> PRT
<213> Homo sapiens

<400> 1066
```
Arg Ala Arg Gly Arg Cys Arg Arg Ser Pro Asp Gly Val Gly Ile Glu
  1             5               10              15

Ala Pro Arg Lys Lys Val Lys Tyr Gln Glu Ile Gln Val Glu Glu Pro
            20              25              30

Tyr Tyr Asp Cys His Glu Cys Thr Glu Thr Phe Thr Ser Ser Thr Ala
        35              40              45

Phe Ser Glu His Leu Lys Thr His Ala Ser Met Ile Ile Phe Glu Pro
    50              55              60

Ala Asn Ala Phe Gly Glu Cys Ser Gly Tyr Ile Glu Arg Ala Ser Thr
65              70              75              80

Ser Thr Gly Gly Ala Asn Gln Ala Asp Glu Lys Tyr Phe Lys Cys Asp
              85              90              95

Val Cys Gly Gln Leu Phe Asn Asp Arg Leu Ser Leu Ala Arg His Gln
            100             105             110

Asn Thr His Thr Gly
        115
```

<210> 1067
<211> 192
<212> PRT
<213> Homo sapiens

<400> 1067
```
Pro Glu Gln Arg Gly Ser Ser Met Ala His Gly Pro Gly Ala Leu Met
  1             5               10              15

Leu Lys Cys Val Val Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu
            20              25              30
```

```
Leu Met Ser Tyr Ala Asn Asp Ala Phe Pro Glu Ser Thr Cys Pro Pro
        35                  40                  45

Ser Ser Thr Thr Thr Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser
        50                  55                  60

Tyr Pro Met Thr Asp Val Phe Leu Ile Cys Phe Ser Val Val Asn Pro
65                  70                  75                  80

Ala Ser Phe Gln Asn Val Lys Glu Glu Trp Val Pro Glu Leu Lys Glu
            85                  90                  95

Tyr Ala Pro Asn Val Pro Phe Leu Leu Ile Gly Thr Gln Ile Asp Leu
            100                 105                 110

Arg Asp Asp Pro Lys Thr Leu Ala Arg Leu Asn Asp Met Lys Glu Lys
        115                 120                 125

Pro Ile Cys Val Glu Gln Gly Gln Lys Leu Ala Lys Glu Ile Gly Ala
        130                 135                 140

Cys Cys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Thr
145                 150                 155                 160

Val Phe Asp Glu Ala Ile Ile Ala Ile Leu Thr Pro Lys Lys His Thr
                165                 170                 175

Val Lys Lys Arg Ile Gly Ser Arg Cys Ile Asn Cys Cys Leu Ile Thr
            180                 185                 190
```

<210> 1068
<211> 360
<212> PRT
<213> Homo sapiens

<400> 1068
```
Ser Arg Trp Ala Arg Arg Asp Pro Gln Glu Arg Arg Glu Arg Gly Thr
1               5                   10                  15

Arg Val Gln Ser Ser Gly Thr Trp Ile Gly Ala Gly Ala Met Gly Gly
            20                  25                  30

Glu Gln Glu Glu Glu Arg Phe Asp Gly Met Leu Leu Ala Met Ala Gln
        35                  40                  45
```

1056

Gln His Glu Gly Gly Val Gln Glu Leu Val Asn Thr Phe Phe Ser Phe
    50   55   60

Leu Arg Arg Lys Thr Asp Phe Phe Ile Gly Gly Glu Glu Gly Met Ala
65   70   75   80

Glu Lys Leu Ile Thr Gln Thr Phe Ser His His Asn Gln Leu Ala Gln
            85   90   95

Lys Thr Arg Arg Glu Lys Arg Ala Arg Gln Glu Ala Glu Arg Arg Glu.
            100   105   110

Lys Ala Glu Arg Ala Ala Arg Leu Ala Lys Glu Ala Lys Ser Glu Thr
            115   120   125

Ser Gly Pro Gln Ile Lys Glu Leu Thr Asp Glu Glu Ala Glu Arg Leu
    130   135   140

Gln Leu Glu Ile Asp Gln Lys Lys Asp Ala Glu Asn His Glu Ala Gln
145   150   155   160

Leu Lys Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp Thr Glu Glu
            165   170   175

Asp Glu Glu Glu Asp Glu Lys Asp Lys Gly Lys Leu Lys Pro Asn Leu
            180   185   190

Gly Asn Gly Ala Asp Leu Pro Asn Tyr Arg Trp Thr Gln Thr Leu Ser
            195   200   205

Glu Leu Asp Leu Ala Val Pro Phe Cys Val Asn Phe Arg Leu Lys Gly
    210   215   220

Lys Asp Met Val Val Asp Ile Gln Arg Arg His Leu Arg Val Gly Leu
225   230   235   240

Lys Gly Gln Pro Ala Ile Ile Asp Gly Glu Leu Tyr Asn Glu Val Lys
            245   250   255

Val Glu Glu Ser Ser Trp Leu Ile Glu Asp Gly Lys Val Val Thr Val
            260   265   270

His Leu Glu Lys Ile Asn Lys Met Glu Trp Trp Ser Arg Leu Val Ser
    275   280   285

Ser Asp Pro Glu Ile Asn Thr Lys Lys Ile Asn Pro Glu Asn Ser Lys
    290   295   300

Leu Ser Asp Leu Asp Ser Glu Thr Arg Ser Met Val Glu Lys Met Met
305   310   315   320

Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr Ser Asp Glu Gln
            325   330   335

Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln His Pro Glu Met
            340   345   350

Asp Phe Ser Lys Ala Lys Phe Asn
            355   360

<210> 1069
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1069
Val Trp Leu Ser Trp Asp Gln Glu Lys Ile Pro Val Leu Asp Gln Glu
 1   5   10   15

Ala Ala Asp Gly Ser Ser Thr Leu Gly Gly Gly Ala Gly Thr Met Gly
            20   25   30

Leu Ser Ala Arg Tyr Gly Pro Gln Phe Thr Leu Gln His Val Pro Asp
            35   40   45

Tyr Arg Gln Xaa Val Tyr Ile Pro Gly Ser Asn Ala Thr Leu Thr Asn
     50   55   60

Ala Ala Gly Lys Arg Gly Trp Gln Gly Pro Ser Arg Trp Gln Trp Gln
 65   70   75   80

Gln Glu Glu Val Gly Gln Glu Gly Glu Glu Val Thr Trp Arg Pro Gly
                 85   90   95

Gln Glu Pro Gln Gly Gly Leu Ser Pro Thr Ser Pro Ala Ser Pro Tyr
            100   105   110

Leu His Pro Gly Leu Arg Val Ser Gly Leu Thr Pro Arg Ile Leu Val
            115   120   125

Gly Ala Lys Ala Met Leu Pro Leu Gly Asn Arg Asn Lys Cys Pro Val
            130   135   140

Ser Thr Tyr Pro Phe Pro Pro Arg Gly Leu Asn Met Gln Lys Gln Phe
145   150   155   160

1058

Arg Trp Glu Pro Pro Ser Asn Gln Leu Leu Tyr Pro Trp Gly
              165   170

<210> 1070
<211> 445
<212> PRT
<213> Homo sapiens

<400> 1070
Pro Arg Gly Leu Thr Gly Leu Trp Arg Ser Ser Leu Pro Ile Arg Lys
  1   5   10   15

Leu Gln Leu Pro Pro Asp Ala Leu Lys Met Ala Thr Ser Leu Gly Ser
              20   25   30

Asn Thr Tyr Asn Arg Gln Asn Trp Glu Asp Ala Asp Phe Pro Ile Leu
          35   40   45

Cys Gln Thr Cys Leu Gly Glu Asn Pro Tyr Ile Arg Met Thr Lys Glu
      50   55   60

Lys Tyr Gly Lys Glu Cys Lys Ile Cys Ala Arg Pro Phe Thr Val Phe
65   70   75   80

Arg Trp Cys Pro Gly Val Arg Met Arg Phe Lys Lys Thr Glu Val Cys
              85   90   95

Gln Thr Cys Ser Lys Leu Lys Asn Val Cys Gln Thr Cys Leu Leu Asp
          100   105   110

Leu Glu Tyr Gly Leu Pro Ile Gln Val Arg Asp Ala Gly Leu Ser Phe
          115   120   125

Lys Asp Asp Met Pro Lys Ser Asp Val Asn Lys Glu Tyr Tyr Thr Gln
    130   135   140

Asn Met Glu Arg Glu Ile Ser Asn Ser Asp Gly Thr Arg Pro Val Gly
145   150   155   160

Met Leu Gly Lys Ala Thr Ser Thr Ser Asp Met Leu Leu Lys Leu Ala
              165   170   175

Arg Thr Thr Pro Tyr Tyr Lys Arg Asn Arg Pro His Ile Cys Ser Phe
              180   185   190

Trp Val Lys Gly Glu Cys Lys Arg Gly Glu Glu Cys Pro Tyr Arg His
          195   200   205

1059

```
Glu Lys Pro Thr Asp Pro Asp Asp Pro Leu Ala Asp Gln Asn Ile Lys
    210             215             220

Asp Arg Tyr Tyr Gly Ile Asn Asp Pro Val Ala Asp Lys Leu Leu Lys
225             230             235             240

Arg Ala Ser Thr Met Pro Arg Leu Asp Pro Pro Glu Asp Lys Thr Ile
                245             250             255

Thr Thr Leu Tyr Val Gly Gly Leu Gly Asp Thr Ile Thr Glu Thr Asp
            260             265             270

Leu Arg Asn His Phe Tyr Gln Phe Gly Glu Ile Arg Thr Ile Thr Val
            275             280             285

Val Gln Arg Gln Gln Cys Ala Phe Ile Gln Phe Ala Thr Arg Gln Ala
    290             295             300

Ala Glu Val Ala Ala Glu Lys Ser Phe Asn Lys Leu Ile Val Asn Gly
305             310             315             320

Arg Arg Leu Asn Val Lys Trp Gly Arg Ser Gln Ala Ala Arg Gly Lys
            325             330             335

Glu Lys Glu Lys Asp Gly Thr Thr Asp Ser Gly Ile Lys Leu Glu Pro
            340             345             350

Val Pro Gly Leu Pro Gly Ala Leu Pro Pro Pro Ala Ala Glu Glu
            355             360             365

Glu Ala Ser Ala Asn Tyr Phe Asn Leu Pro Pro Ser Gly Pro Pro Ala
    370             375             380

Val Val Asn Ile Ala Leu Pro Pro Pro Gly Ile Ala Pro Pro Pro
385             390             395             400

Pro Pro Gly Phe Gly Pro His Met Phe His Pro Met Gly Pro Pro Pro
            405             410             415

Pro Phe Met Arg Ala Pro Gly Pro Ile His Tyr Pro Ser Gln Asp Pro
            420             425             430

Gln Arg Met Gly Ala His Ala Gly Lys His Ser Ser Pro
            435             440             445
```

<210> 1071
<211> 346
<212> PRT
<213> Homo sapiens

1060

```
<220>
<221> SITE
<222> (286)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (287)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (291)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (294)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1071
Trp Ser Arg Leu Cys Leu Leu Lys Gln Tyr Leu Phe Thr Met Lys Leu
 1               5                10                15

Gln Ser Pro Glu Phe Gln Ser Leu Phe Thr Glu Gly Leu Lys Ser Leu
            20                25                30

Thr Glu Leu Phe Val Lys Glu Asn His Glu Leu Arg Ile Ala Gly Gly
           35                40                45

Ala Val Arg Asp Leu Leu Asn Gly Val Lys Pro Gln Asp Ile Asp Phe
        50                55                60

Ala Thr Thr Ala Thr Pro Thr Gln Met Lys Glu Met Phe Gln Ser Ala
65                70                75                80

Gly Ile Arg Met Ile Asn Asn Arg Gly Glu Lys His Gly Thr Ile Thr
                85                90                95

Ala Arg Leu His Glu Glu Asn Phe Glu Ile Thr Thr Leu Arg Ile Asp
           100               105               110

Val Thr Thr Asp Gly Arg His Ala Glu Val Glu Phe Thr Thr Asp Trp
           115               120               125

Gln Lys Asp Ala Glu Arg Arg Asp Leu Thr Ile Asn Ser Met Phe Leu
        130               135               140

Gly Phe Asp Gly Thr Leu Phe Asp Tyr Phe Asn Gly Tyr Glu Asp Leu
145               150               155               160
```

```
Lys Asn Lys Lys Val Arg Phe Val Gly His Ala Lys Gln Arg Ile Gln
            165             170             175

Glu Asp Tyr Leu Arg Ile Leu Arg Tyr Phe Arg Phe Tyr Gly Arg Ile
            180             185             190

Val Asp Lys Pro Gly Asp His Asp Pro Glu Thr Leu Glu Ala Ile Ala
            195             200             205

Glu Asn Ala Lys Gly Leu Ala Gly Ile Ser Gly Glu Arg Ile Trp Val
    210             215             220

Glu Leu Lys Lys Ile Leu Val Gly Asn His Val Asn His Leu Ile His
225             230             235             240

Leu Ile Tyr Asp Leu Asp Val Ala Pro Tyr Ile Gly Leu Pro Ala Asn
            245             250             255

Ala Ser Leu Glu Glu Phe Asp Lys Val Ser Lys Asn Val Asp Gly Phe
            260             265             270

Ser Pro Lys Pro Val Thr Leu Leu Ala Ser Leu Phe Lys Xaa Xaa Asp
            275             280             285

Asp Val Xaa Lys Leu Xaa Leu Arg Leu Lys Ile Ala Lys Glu Glu Lys
            290             295             300

Asn Leu Gly Leu Phe Ile Val Lys Asn Arg Lys Asp Leu Ile Lys Ala
305             310             315             320

Thr Asp Ser Ser Asp Pro Leu Lys Pro Tyr Gln Asp Phe Ile Ile Asp
            325             330             335

Ser Arg Glu Pro Asp Ala His Ser Cys Met
            340             345
```

<210> 1072
<211> 404
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1072
Glu Asp Ser Leu Asn Leu Asp Leu Thr Pro Arg Met Leu Arg Arg Leu
 1   ·   5   10   15

Leu Glu Arg Pro Cys Thr Leu Ala Leu Leu Val Gly Ser Gln Leu Ala
              20   25   30

Val Met Met Tyr Leu Ser Leu Gly Gly Phe Arg Ser Leu Ser Ala Leu
          35   40   45

Phe Gly Arg Asp Gln Gly Pro Thr Phe Asp Tyr Ser His Pro Arg Asp
      50   55   60

Val Tyr Ser Asn Leu Ser His Leu Pro Gly Ala Pro Xaa Gly Pro Pro
 65   70   75   80

Xaa Pro Gln Gly Leu Pro Tyr Cys Pro Glu Arg Ser Pro Leu Leu Val
              85   90   95

Gly Pro Val Ser Val Ser Phe Ser Pro Val Pro Ser Leu Ala Glu Ile
              100   105   110

Val Glu Arg Asn Pro Arg Val Glu Pro Gly Gly Arg Tyr Arg Pro Ala
          115   120   125

Gly Cys Glu Pro Arg Ser Arg Thr Ala Ile Ile Val Pro His Arg Ala
      130   135   140

Arg Glu His His Leu Arg Leu Leu Leu Tyr His Leu His Pro Phe Leu
145·   150   .   155   160

Gln Arg Gln Gln Leu Ala Tyr Gly Ile Tyr Val Ile His Gln Ala Gly
              165   170   175

Asn Gly Thr Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Val Arg Glu
              180   185   190

Ala Leu Arg Asp Glu Glu Trp Asp Cys Leu Phe Leu His Asp Val Asp
          195   200   205

Leu Leu Pro Glu Asn Asp His Asn Leu Tyr Val Cys Asp Pro Arg Gly
      210   215   220

Pro Arg His Val Ala Val Ala Met Asn Lys Phe Gly Tyr Ser Leu Pro
225   230   235   240

Tyr Pro Gln Tyr Phe Gly Gly Val Ser Ala Leu Thr Pro Asp Gln Tyr
              245   250   255

```
Leu Lys Met Asn Gly Phe Pro Asn Glu Tyr Trp Gly Trp Gly Gly Glu
        260             265             270

Asp Asp Asp Ile Ala Thr Arg Val Arg Leu Ala Gly Met Lys Ile Ser
        275             280             285

Arg Pro Pro Thr Ser Val Gly His Tyr Lys Met Val Lys His Arg Gly
        290             295             300

Asp Lys Gly Asn Glu Glu Asn Pro His Arg Phe Asp Leu Leu Val Arg
305             310             315             320

Thr Gln Asn Ser Trp Thr Gln Asp Gly Met Asn Ser Leu Thr Tyr Gln
        325             330             335

Leu Leu Ala Arg Glu Leu Gly Pro Leu Tyr Thr Asn Ile Thr Ala Asp
        340             345             350

Ile Gly Thr Asp Pro Arg Gly Pro Arg Ala Pro Ser Gly Pro Arg Tyr
        355             360             365

Pro Pro Gly Ser Ser Gln Ala Phe Arg Gln Glu Met Leu Gln Arg Arg
        370             375             380

Pro Pro Ala Arg Pro Gly Pro Leu Ser Thr Ala Asn His Thr Ala Leu
385             390             395             400

Arg Gly Ser His
```

<210> 1073
<211> 217
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1073
```
Asn Lys Glu Gln Leu Met Asp Lys Ser Gly Ile Asp Ser Leu Asp His
   1             5              10              15

Val Thr Ser Asp Ala Val Glu Leu Ala Asn Arg Ser Asp Asn Ser Ser
            20              25              30

Asp Ser Ser Leu Phe Lys Thr Gln Cys Ile Pro Tyr Ser Pro Lys Gly
```

1064

```
            35                    40                    45

Glu Lys Arg Asn Pro Ile Arg Lys Phe Val Arg Thr Pro Glu Ser Val
     50                    55                    60

His Ala Ser Xaa Ser Ser Ser Asp Ser Ser Phe Glu Pro Ile Pro Leu
 65                    70                    75                    80

Thr Ile Lys Ala Ile Phe Glu Arg Phe Lys Asn Arg Lys Lys Arg Tyr
                  85                    90                    95

Lys Lys Lys Lys Lys Arg Arg Tyr Gln Pro Thr Gly Arg Pro Arg Gly
                 100                   105                   110

Arg Pro Glu Gly Arg Arg Asn Pro Ile Tyr Ser Leu Ile Asp Lys Lys
         115                   120                   125

Lys Gln Phe Arg Ser Arg Gly Ser Gly Phe Pro Phe Leu Glu Ser Glu
     130                   135                   140

Asn Glu Lys Asn Ala Pro Trp Arg Lys Ile Leu Thr Phe Glu Gln Ala
145                   150                   155                   160

Val Ala Arg Gly Phe Phe Asn Tyr Ile Glu Lys Leu Lys Tyr Glu His
                 165                   170                   175

His Leu Lys Glu Ser Leu Lys Gln Met Asn Val Gly Glu Asp Leu Glu
             180                   185                   190

Asn Glu Asp Phe Asp Ser Arg Arg Tyr Lys Phe Leu Asp Asp Asp Gly
         195                   200                   205

Ser Ile Ser Pro Ile Glu Glu Ser Thr
    210                   215
```

<210> 1074
<211> 161
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

```
·<220>
 <221> SITE
 <222> (123)
 <223> Xaa equals any of the naturally occurring L-amino acids


 <220>
 <221> SITE
 <222> (125)
 <223> Xaa equals any of the naturally occurring L-amino acids  .


 <220>
 <221> SITE
 <222> (128)
 <223> Xaa equals any of the naturally occurring L-amino acids


 <220>
 <221> SITE
 <222> (147)
 <223> Xaa equals any of the naturally occurring L-amino acids


 <400> 1074
 Thr His Tyr Arg Ala Lys Leu Val Arg Leu Pro Gly Thr Gly Ser Gly
   1               5                  10                  15


 Asn Ser Arg Val Asp Pro Arg Val Arg Glu Gln Pro Ser Pro Ala Ser
             20                  25                  30


 Ser Ala Pro Gly Gln Leu Asn Ser Cys Gln Asp Val Leu Pro Ala Glu
             35                  40                  45


 Pro Ala Ala Val Pro Thr Pro Thr Gln Val Ser Leu Thr Gln Val Ser
     50                  55                  60


 Pro Lys Glu Pro Ser Thr Val Ser Ala Ser Ser Phe Leu Trp Leu Cys
 65                  70                  75                  80


 Pro Lys Leu Trp Gly Leu Trp Pro Ser Ser Glu Gly Gly Cys Phe Leu
                 85                  90                  95


 Asn His His Arg Arg His His Arg Cys Arg Arg Gln Arg Xaa Asn Ser
                 100                 105                 110


 Cys Asp Arg Ala Val Val Ser Lys Ala Xaa Xaa Leu Xaa Ala Ala Xaa
             115                 120                 125


 Phe Trp Gly Leu Leu Leu Ile Gln Ile Leu Met Leu Arg Gln Ala Ile
     130                 135                 140


 Phe Gly Xaa Asn Lys Asn Ser Gln Glu Ala Lys Asn Ser Pro Ile Trp
 145                 150                 155                 160
```

```
His Pro Gln Val Pro Ser Val Val Ala Leu Cys Lys Phe
    210             215             220
```

<210> 1076
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1076
```
Ala Arg Gly Ala Arg Val Arg Ala Cys Ala Ser Leu Gly Ser Trp Arg
 1           5               10              15

Gly Pro Arg Gly Glu Gly Trp Lys Met Ser Met Asp Val Thr Phe Leu
            20              25              30

Gly Thr Gly Ala Ala Tyr Pro Ser Pro Thr Arg Gly Ala Ser Ala Val
            35              40              45

Val Leu Arg Cys Glu Gly Glu Xaa Trp Leu Phe Asp Cys Gly Glu Gly
    50              55              60

Thr Gln Thr Gln Leu Met Lys Ser Gln Leu Lys Ala Gly Arg Ile Thr
65              70              75              80

Lys Ile Phe Ile Thr His Leu His Gly Asp His Phe Phe Gly Leu Pro
            85              90              95

Gly Leu Leu Cys Thr Ile Ser Leu Gln Ser Gly Ser Met Val Ser Lys
            100             105             110
```

```
Gln Pro Ile Glu Ile Tyr Gly Pro Val Gly Phe Gly Thr Leu Ser Gly
        115                 120                 125

Glu Pro Trp Asn Ser Leu Xaa Arg Glu Leu Val Phe His Tyr Val Val
        130                 135                 140

His Glu Leu Val Pro Thr Ala Asp Gln Cys Pro Ala Glu Gly Thr Lys
145                 150                 155                 160

Arg Ile Xaa Ala Cys Xaa
                165
```

<210> 1077
<211> 239
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1077
```
Gly Leu Arg Ala Leu Ser Gln His Thr Asp Leu Ser Pro Leu Ser Pro
  1               5                 10                  15

Lys Thr Pro Ala Pro Ser Met Arg Xaa Lys Met Gly Asn Gly Thr Glu
            20                  25                  30

Glu Asp Tyr Asn Phe Val Phe Lys Val Val Leu Ile Gly Glu Ser Gly
        35                  40                  45

Val Gly Lys Thr Asn Leu Leu Ser Arg Phe Thr Arg Asn Glu Phe Ser
    50                  55                  60

His Asp Ser Arg Thr Thr Ile Gly Val Glu Phe Ser Thr Arg Thr Val
65                  70                  75                  80

Met Leu Gly Thr Ala Ala Val Lys Ala Gln Ile Trp Asp Thr Ala Gly
            85                  90                  95

Leu Glu Arg Tyr Arg Ala Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val
            100                 105                 110

Gly Ala Leu Leu Val Phe Asp Leu Thr Lys His Gln Thr Tyr Ala Val
            115                 120                 125

Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp His Ala Glu Ala Thr Ile
```

```
           130                    135                     140

Val Val Met Leu Val Gly Asn Lys Ser Asp Leu Ser Gln Ala Arg Glu
145                 150             155                 160

Val Pro Thr Glu Glu Ala Arg Met Phe Ala Glu Asn Asn Gly Leu Leu
                165             170                 175

Phe Leu Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Glu Leu Ala Phe
                180             185                 190

Glu Thr Val Leu Lys Glu Ile Phe Ala Lys Val Ser Lys Gln Arg Gln
                195             200             205

Asn Ser Ile Arg Thr Asn Ala Ile Thr Ser Gly Ser Ala Gln Ala Gly
        210             215             220

Gln Glu Pro Gly Pro Gly Glu Lys Arg Ala Cys Cys Ile Ser Leu
225                 230             235
```

<210> 1078
<211> 171
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1078
```
Ile Leu Lys Gly Ser Ser Gly Ser Val Trp Leu Arg Asn Leu Gln Leu
 1               5                  10                  15

Gly Leu Phe Gly Thr Ala Leu Gly Leu Val Gly Leu Trp Trp Ala Glu
            20              25              30

Gly Thr Ala Val Ala Thr Arg Gly Phe Phe Phe Gly Tyr Thr Pro Ala
        35              40              45

Val Trp Gly Val Val Leu Asn Gln Ala Phe Gly Gly Leu Leu Val Ala
        50              55              60

Val Val Val Lys Tyr Ala Asp Asn Ile Leu Lys Gly Phe Ala Thr Ser
65              70              75                  80

Leu Ser Ile Val Leu Ser Thr Val Ala Ser Ile Arg Leu Phe Gly Phe
                85              90                  95
```

1070

His Val Asp Pro Leu Phe Ala Leu Gly Ala Gly Leu Val Ile Gly Ala
            100   105   110

Val Tyr Leu Tyr Ser Leu Pro Arg Gly Ala Xaa Lys Ala Ile Ala Ser
        115   120   125

Ala Ser Ala Ser Ala Ser Gly Pro Cys Val His Gln Gln Pro Pro Gly
    130   135   140

Gln Pro Pro Pro Pro Gln Leu Ser Ser His Arg Gly Asp Leu Ile Thr
145   150   155   160

Glu Pro Phe Leu Pro Lys Ser Val Leu Val Lys
                165   170

<210> 1079
<211> 141
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1079
Arg Arg Val Cys His Ser Ser Pro His Leu Ser Ser Pro Arg Ala Ala
  1   5   10   15

Cys Glu Gln Gln Ala Val Ala Leu Thr Leu Gln Glu Asp Arg Ala Ser
            20   25   30

Leu Thr Leu Ser Gly Gly Pro Ser Ala Leu Ala Phe Asp Leu Ser Lys
        35   40   45

Val Pro Gly Pro Glu Ala Ala Pro Arg Leu Xaa Ala Leu Thr Leu Gly
    50   55   60

Leu Ala Lys Arg Val Trp Ser Leu Glu Arg Arg Leu Ala Ala Ala Glu
65   70   75   80

Glu Thr Ala Val Ser Pro Arg Lys Ser Pro Arg Pro Ala Gly Pro Gln
            85   90   95

Leu Phe Leu Pro Asp Pro Asp Pro Gln Arg Gly Gly Pro Gly Pro Gly
            100   105   110

Val Arg Arg Arg Cys Pro Gly Glu Ser Leu Ile Asn Pro Gly Phe Lys
        115   120   125

```
Ser Lys Lys Pro Ala Gly Gly Val Asp Phe Asp Glu Thr
    130                 135             140
```

<210> 1080
<211> 359
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1080
```
Ala Val Glu Ser Arg Xaa Pro Gly Trp Asn His His Gly Ile Gln Phe
  1             5                 10                  15

Pro Cys Gly Ser Val Trp Leu Glu His Ala Ile Ala Met Ile Cys Gly
            20              25                  30

Asn Val Cys Leu Trp Lys Gly Ala Pro Thr Thr Ser Leu Ile Ser Val
            35              40                  45

Ala Val Thr Lys Ile Ile Ala Lys Val Leu Glu Asp Asn Lys Leu Pro
    50                  55                  60

Gly Ala Ile Cys Ser Leu Thr Cys Gly Gly Ala Asp Ile Gly Thr Ala
 65                  70                  75                  80

Met Ala Lys Asp Glu Arg Val Asn Leu Leu Ser Phe Thr Gly Ser Thr
                85                  90                  95

Gln Val Gly Lys Gln Val Gly Leu Met Val Gln Glu Arg Phe Gly Arg
                100             105                 110

Ser Leu Leu Glu Leu Gly Gly Asn Asn Ala Ile Ile Ala Phe Glu Asp
            115             120                 125

Ala Asp Leu Ser Leu Val Val Pro Ser Ala Leu Phe Ala Ala Val Gly
    130             135                 140

Thr Ala Gly Gln Arg Cys Thr Thr Ala Arg Arg Leu Phe Ile His Glu
145                 150             155                 160

Ser Ile His Asp Glu Val Val Asn Arg Leu Lys Lys Ala Tyr Ala Gln
                165             170                 175

Ile Arg Val Gly Asn Pro Trp Asp Pro Asn Val Leu Tyr Gly Pro Leu
```

1072

                    180   185   190

    His Thr Lys Gln Ala Val Ser Met Phe Leu Gly Ala Val Glu Glu Ala
            195   200   205

    Lys Lys Glu Gly Gly Thr Val Val Tyr Gly Gly Lys Val Met Asp Arg
            210   215   220

    Pro Gly Asn Tyr Val Glu Pro Thr Ile Val Thr Gly Leu Gly His Asp
    225   230   235   240

    Ala Ser Ile Ala His Thr Glu Thr Phe Ala Pro Ile Leu Tyr Val Phe
                    245   250   255

    Lys Phe Lys Asn Glu Glu Glu Val Phe Ala Trp Asn Asn Glu Val Lys
            260   265   270

    Gln Gly Leu Ser Ser Ser Ile Phe Thr Lys Asp Leu Gly Arg Ile Phe
            275   280   285

    Arg Trp Leu Gly Pro Lys Gly Ser Asp Cys Gly Ile Val Asn Val Asn
            290   295   300

    Ile Pro Thr Ser Gly Ala Glu Ile Gly Gly Ala Phe Gly Gly Glu Lys
    305   310   315   320

    His Thr Gly Gly Gly Arg Glu Ser Gly Ser Asp Ala Trp Lys Gln Tyr
                    325   330   335

    Met Arg Arg Ser Thr Cys Thr Ile Asn Tyr Ser Lys Asp Leu Pro Leu
                    340   345   350

    Ala Gln Gly Ile Lys Phe Gln
            355

<210> 1081
<211> 138
<212> PRT
<213> Homo sapiens

<400> 1081
Ala Val Pro Leu Leu Gly Arg Pro Thr Arg Pro Val Gly Pro Arg Ala
 1   5   10   15

Ala Leu Thr Met Thr Gln Gln Gly Ala Ala Leu Gln Asn Tyr Asn Asn
            20   25   30

Glu Leu Val Lys Cys Ile Glu Glu Leu Cys Gln Lys Arg Glu Glu Leu
            35   40   45

1073

```
Cys Arg Gln Ile Gln Glu Glu Glu Asp Glu Lys Gln Arg Leu Gln Asn
    50              55              60

Glu Val Arg Gln Leu Thr Glu Lys Leu Ala Arg Val Asn Glu Asn Leu
65              70              75              80

Ala Arg Lys Ile Ala Ser Arg Asn Glu Phe Asp Arg Thr Ile Ala Glu
            85              90                      95

Thr Glu Ala Ala Tyr Leu Lys Ile Leu Glu Ser Ser Gln Thr Leu Leu
            100             105             110

Ser Val Leu Lys Arg Glu Ala Gly Asn Leu Thr Lys Ala Thr Ala Pro
        115             120             125

Asp Gln Lys Ser Ser Gly Gly Arg Asp Ser
    130             135
```

```
<210> 1082
<211> 339
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1082
Ser Pro Ile Ser Asn Cys Glu Ile Thr Ile Thr Asp Pro Gly Lys Phe
 1               5               10              15

Tyr Asn Ser Asn Ser Val Phe Ser Arg Gly Asn Met Ala Lys Val Phe
            20              25              30

Ser Phe Ile Leu Val Thr Thr Ala Leu Xaa Met Gly Arg Glu Ile Ser
        35              40              45

Ala Leu Glu Asp Cys Ala Gln Glu Gln Met Arg Leu Arg Ala Gln Val
    50              55              60

Arg Leu Leu Glu Thr Arg Val Lys Gln Gln Gln Val Lys Ile Lys Gln
65              70              75              80

Leu Leu Gln Glu Asn Glu Val Gln Phe Leu Asp Lys Gly Asp Glu Asn
            85              90              95

Thr Val Val Asp Leu Gly Ser Lys Arg Gln Tyr Ala Asp Cys Ser Glu
```

1074

```
              100                    105                    110
Ile Phe Asn Asp Gly Tyr Lys Leu Ser Gly Phe Tyr Lys Ile Lys Pro
        115                120                125

Leu Gln Ser Pro Ala Glu Phe Ser Val Tyr Cys Asp Met Ser Asp Gly
        130                135                140

Gly Gly Trp Thr Val Ile Gln Arg Arg Ser Asp Gly Ser Glu Asn Phe
145                150                155                160

Asn Arg Gly Trp Lys Asp Tyr Glu Asn Gly Phe Gly Asn Phe Val Gln
                165                170                175

Lys His Gly Glu Tyr Trp Leu Gly Asn Lys Asn Leu His Phe Leu Thr
            180                185                190

Thr Gln Glu Asp Tyr Thr Leu Lys Ile Asp Leu Ala Asp Phe Glu Lys
        195                200                205

Asn Ser Arg Tyr Ala Gln Tyr Lys Asn Phe Lys Val Gly Asp Glu Lys
    210                215                220

Asn Phe Tyr Glu Leu Asn Ile Gly Glu Tyr Ser Gly Thr Ala Gly Asp
225                230                235                240

Ser Leu Ala Gly Asn Phe His Pro Glu Val Gln Trp Trp Ala Ser His
            245                250                255

Gln Arg Met Lys Phe Ser Thr Trp Asp Arg Asp His Asp Asn Tyr Glu
            260                265                270

Gly Asn Cys Ala Glu Glu Asp Gln Ser Gly Trp Trp Phe Asn Arg Cys
        275                280                285

His Ser Ala Asn Leu Asn Gly Val Tyr Tyr Ser Gly Pro Tyr Thr Ala
    290                295                300

Lys Thr Asp Asn Gly Ile Val Trp Tyr Thr Trp His Gly Trp Trp Tyr
305                310                315                320

Ser Leu Lys Ser Val Val Met Lys Ile Arg Pro Asn Asp Phe Ile Pro
                325                330                335

Asn Val Ile
```

<210> 1083
<211> 256

1075

```
<212>  PRT
<213>  Homo sapiens

<220>
<221>  SITE
<222>  (56)
<223>  Xaa equals any of the naturally occurring L-amino acids

<400>  1083
Lys Ser Leu Asn Gly Pro Ala Asp Phe Glu Lys Arg Val Glu Gly Gly
 1               5               10              15

Gly Arg Pro Arg Ala Pro Leu Val Asn Ala Leu Leu Thr Ala Pro Glu
            20              25              30

Phe Leu Ile Tyr Thr Gly Cys Met Val Cys Val Phe Leu Phe Cys Phe
            35              40              45

Ser Pro Pro Ala Gly Leu Phe Xaa Gly Trp Gly Gly Gly Phe Ala Met
         50              55              60

Ser Asp Asp Asp Ser Arg Ala Ser Thr Ser Ser Ser Ser Ser Ser Ser
65              70              75              80

Ser Asn Gln Gln Thr Glu Lys Glu Thr Asn Thr Pro Lys Lys Lys Glu
                85              90              95

Ser Lys Val Ser Met Ser Lys Asn Ser Lys Leu Leu Ser Thr Ser Ala
            100             105             110

Lys Arg Ile Gln Lys Glu Leu Ala Asp Ile Thr Leu Asp Pro Pro Pro
         115             120             125

Asn Cys Ser Ala Gly Pro Lys Gly Asp Asn Ile Tyr Glu Trp Arg Ser
     130             135             140

Thr Ile Leu Gly Pro Pro Gly Ser Val Tyr Glu Gly Gly Val Phe Phe
145             150             155             160

Leu Asp Ile Thr Phe Thr Pro Glu Tyr Pro Phe Lys Pro Pro Lys Val
            165             170             175

Thr Phe Arg Thr Arg Ile Tyr His Cys Asn Ile Asn Ser Gln Gly Val
            180             185             190

Ile Cys Leu Asp Ile Leu Lys Asp Asn Trp Ser Pro Ala Leu Thr Ile
     195             200             205

Ser Lys Val Leu Leu Ser Ile Cys Ser Leu Leu Thr Asp Cys Asn Pro
     210             215             220
```

```
Ala Asp Pro Leu Val Gly Ser Ile Ala Thr Gln Tyr Met Thr Asn Arg
225                 230             235                 240

Ala Glu His Asp Arg Met Ala Arg Gln Trp Thr Lys Arg Tyr Ala Thr
                245             250             255
```

<210> 1084
<211> 176
<212> PRT
<213> Homo sapiens

<400> 1084

```
Glu Lys Cys Val Ser Phe Ser Ala Val Leu Lys Ser Leu Ser Pro Val
  1             5                 10                 15

Asp Pro Val Glu Pro Ile Ser Asn Ser Glu Pro Ser Met Asn Ser Asp
                20                25                30

Met Gly Lys Val Ser Lys Asn Asp Thr Glu Glu Glu Ser Asn Lys Ser
            35                40                45

Ala Thr Thr Asp Asn Glu Ile Ser Arg Thr Glu Tyr Leu Cys Glu Asn
        50                55                60

Ser Leu Glu Gly Lys Asn Lys Asp Asn Ser Ser Asn Glu Val Phe Pro
 65                70                75                80

Gln Gly Ala Glu Glu Arg Met Cys Tyr Gln Cys Glu Ser Glu Asp Glu
                85                90                95

Pro Gln Ala Asp Gly Ser Gly Leu Thr Thr Ala Pro Pro Thr Pro Arg
                100             105             110

Asp Ser Leu Gln Pro Ser Ile Lys Gln Arg Leu Ala Arg Leu Gln Leu
            115             120             125

Ser Pro Asp Phe Thr Phe Thr Ala Gly Leu Ala Ala Glu Val Ala Ala
        130             135             140

Arg Ser Leu Ser Phe Thr Thr Met Gln Glu Gln Thr Phe Gly Asp Glu
145             150             155             160

Glu Glu Glu Gln Ile Ile Glu Glu Asn Lys Asn Glu Ile Glu Glu Lys
                165             170             175
```

1077

<210> 1085
<211> 220
<212> PRT
<213> Homo sapiens

<400> 1085
His Arg Lys Ser Arg Pro Ala Asn His Cys Val Tyr Phe Tyr Gly Asp
 1   5   10   15

Glu Ile Ser Phe Ser Cys His Glu Thr Ser Arg Phe Ser Ala Ile Cys
             20   25   30

Gln Gly Asp Gly Thr Trp Ser Pro Arg Thr Pro Ser Cys Gly Asp Ile
             35   40   45

Cys Asn Phe Pro Pro Lys Ile Ala His Gly His Tyr Lys Gln Ser Ser
         50   55   60

Ser Tyr Ser Phe Phe Lys Glu Glu Ile Ile Tyr Glu Cys Asp Lys Gly
65   70   75   80

Tyr Ile Leu Val Gly Gln Ala Lys Leu Ser Cys Ser Tyr Ser His Trp
                 85   90   95

Ser Ala Pro Ala Pro Gln Cys Lys Ala Leu Cys Arg Lys Pro Glu Leu
             100   105   110

Val Asn Gly Arg Leu Ser Val Asp Lys Asp Gln Tyr Val Glu Pro Glu
         115   120   125

Asn Val Thr Ile Gln Cys Asp Ser Gly Tyr Gly Val Val Gly Pro Gln
    130   135   140

Ser Ile Thr Cys Ser Gly Asn Arg Thr Trp Tyr Pro Glu Val Pro Lys
145   150   155   160

Cys Glu Trp Glu Thr Pro Glu Gly Cys Glu Gln Val Leu Thr Gly Lys
                 165   170   175

Arg Leu Met Gln Cys Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu
             180   185   190

Glu Val Tyr Lys Leu Ser Leu Glu Ile Glu Gln Leu Glu Leu Gln Arg
         195   200   205

Asp Ser Ala Arg Gln Ser Thr Leu Asp Lys Glu Leu
    210   215   220

1078

<210> 1086
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1086
Val Lys Pro Ser Gly Gly Glu Gly Asp Val Ala Gln Arg Pro Arg Asp
 1   5   10   15

Arg Leu Ser Ser Arg Leu Leu Gly Ser Pro Ala Trp Arg Arg Arg Leu
            20   25   30

Met Thr Glu Gly Pro Leu Ala Gly Ala Pro Val Cys Ile Phe Glu Gly
        35   40   45

Pro Gly Pro Pro Gly Gly Ala Gly Ser Tyr Ser Trp Gly Leu Gly Phe
    50   55   60

Arg Arg Ala Gly Gly Gly Ala Gly Leu Lys Ala Ala Leu Val Tyr Gly
65   70   75   80

Val Val Thr Gln Ser His Trp Gln Arg Trp Gly Leu Ala Val Ala Trp
            85   90   95

Gln Tyr Leu Gly Ile Ala Ser Thr Gly Asn Lys Asp Gly His Glu Gln
            100   105   110

Ser Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
        115   120   125

Lys Lys Lys Lys Lys
    130

<210> 1087
<211> 289
<212> PRT
<213> Homo sapiens

<400> 1087
Ile Leu Thr Tyr Lys Met Lys Gln Asp Ala Ser Arg Asn Ala Ala Tyr
 1   5   10   15

Thr Val Asp Cys Glu Asp Tyr Val His Val Val Glu Phe Asn Pro Phe
            20   25   30

Glu Asn Gly Asp Ser Gly Asn Leu Ile Ala Tyr Gly Gly Asn Asn Tyr

```
              35                    40                    45

 Val Val Ile Gly Thr Cys Thr Phe Gln Glu Glu Glu Ala Asp Val Glu
          50                    55                    60

 Gly Ile Gln Tyr Lys Thr Leu Arg Thr Phe His His Gly Val Arg Val
 65                    70                    75                    80

 Asp Gly Ile Ala Trp Ser Pro Glu Thr Arg Leu Asp Ser Leu Pro Pro
                  85                    90                    95

 Val Ile Lys Phe Cys Thr Ser Ala Ala Asp Met Lys Ile Arg Leu Phe
                 100                   105                   110

 Thr Ser Asp Leu Gln Asp Lys Asn Glu Tyr Lys Val Leu Glu Gly His
             115                   120                   125

 Thr Asp Phe Ile Asn Gly Leu Val Phe Asp Pro Lys Glu Gly Gln Glu
             130                   135                   140

 Ile Ala Ser Val Ser Asp Asp His Thr Cys Arg Ile Trp Asn Leu Glu
 145                   150                   155                   160

 Gly Val Gln Thr Ala His Phe Val Leu His Ser Pro Gly Met Ser Val
                 165                   170                   175

 Cys Trp His Pro Glu Glu Thr Phe Lys Leu Met Val Ala Glu Lys Asn
                 180                   185                   190

 Gly Thr Ile Arg Phe Tyr Asp Leu Leu Ala Gln Gln Ala Ile Leu Ser
                 195                   200                   205

 Leu Glu Ser Glu Gln Val Pro Leu Met Ser Ala His Trp Cys Leu Lys
     210                   215                   220

 Asn Thr Phe Lys Val Gly Ala Val Ala Gly Asn Asp Trp Leu Ile Trp
 225                   230                   235                   240

 Asp Ile Thr Arg Ser Ser Tyr Pro Gln Asn Lys Arg Pro Val His Met
                 245                   250                   255

 Asp Arg Ala Cys Leu Phe Arg Trp Ser Thr Ile Ser Glu Asn Leu Phe
                 260                   265                   270

 Ala Thr Thr Gly Tyr Pro Gly Lys Met Gln Ala Ser Phe Lys Phe Ile
                 275                   280                   285

 Ile
```

1080

<210> 1088
<211> 836
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (677)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1088
Pro Thr Arg Pro Asn Trp Thr Gly Met Thr Asn Leu Leu Asp Ile Pro
 1   5   10   15

Gly Leu Ser Ser Leu Ser Asp Thr Met Ile Met Asp Ser Ile Ala Ala
            20   25   30

Phe Leu Val Leu Pro Asn Arg Leu Leu Val Pro Leu Val Pro Asp Leu
        35   40   45

Gln Asp Val Ala Gln Leu Arg Ser Pro Leu Pro Arg Gly Ile Ile Arg
        50   55   60

Ile His Leu Leu Ala Ala Arg Gly Leu Ser Ser Lys Asp Lys Tyr Val
65   70   75   80

Lys Gly Leu Ile Glu Gly Lys Ser Asp Pro Tyr Ala Leu Val Arg Leu
                85   90   95

Gly Thr Gln Thr Phe Cys Ser Arg Val Ile Asp Glu Glu Leu Asn Pro
            100   105   110

Gln Trp Gly Glu Thr Tyr Glu Val Met Val His Glu Val Pro Gly Gln
            115   120   125

Glu Ile Glu Val Glu Val Phe Asp Lys Asp Pro Asp Lys Asp Asp Phe
        130   135   140

Leu Gly Arg Met Lys Leu Asp Val Gly Lys Val Leu Gln Ala Ser Val
145   150   155   160

Leu Asp Asp Trp Phe Pro Leu Gln Gly Gly Gln Gly Gln Val His Leu
                165   170   175

Arg Leu Glu Trp Leu Ser Leu Leu Ser Asp Ala Glu Lys Leu Glu Gln
            180   185   190

Val Leu Gln Trp Asn Trp Gly Val Ser Ser Arg Pro Asp Pro Pro Ser
            195   200   205

1081

```
Ala Ala Ile Leu Val Val Tyr Leu Asp Arg Ala Gln Asp Leu Pro Leu
    210             215             220
```

```
Lys Lys Gly Asn Lys Glu Pro Asn Pro Met Val Gln Leu Ser Ile Gln
225             230             235             240
```

```
Asp Val Thr Gln Glu Ser Lys Ala Val Tyr Ser Thr Asn Cys Pro Val
                245             250             255
```

```
Trp Glu Glu Ala Phe Arg Phe Phe Leu Gln Asp Pro Gln Ser Gln Glu
            260             265             270
```

```
Leu Asp Val Gln Val Lys Asp Asp Ser Arg Ala Leu Thr Leu Gly Ala
        275             280             285
```

```
Leu Thr Leu Pro Leu Ala Arg Leu Leu Thr Ala Pro Glu Leu Ile Leu
    290             295             300
```

```
Asp Gln Trp Phe Gln Leu Ser Ser Ser Gly Pro Asn Ser Arg Leu Tyr
305             310             315             320
```

```
Met Lys Leu Val Met Arg Ile Leu Tyr Leu Asp Ser Ser Glu Ile Cys
                325             330             335
```

```
Phe Pro Thr Val Pro Gly Cys Pro Gly Ala Trp Asp Val Asp Ser Glu
                340             345             350
```

```
Asn Pro Gln Arg Gly Ser Ser Val Asp Ala Pro Pro Arg Pro Cys His
            355             360             365
```

```
Thr Thr Pro Asp Ser Gln Phe Gly Thr Glu His Val Leu Arg Ile His
    370             375             380
```

```
Val Leu Glu Ala Gln Asp Leu Ile Ala Lys Asp Arg Phe Leu Gly Gly
385             390             395             400
```

```
Leu Val Lys Gly Lys Ser Asp Pro Tyr Val Lys Leu Lys Leu Ala Gly
            405             410             415
```

```
Arg Ser Phe Arg Ser His Val Val Arg Glu Asp Leu Asn Pro Arg Trp
            420             425             430
```

```
Asn Glu Val Phe Glu Val Ile Val Thr Ser Val Pro Gly Gln Glu Leu
        435             440             445
```

```
Glu Val Glu Val Phe Asp Lys Asp Leu Asp Lys Asp Asp Phe Leu Gly
    450             455             460
```

```
Arg Cys Lys Val Arg Leu Thr Thr Val Leu Asn Ser Gly Phe Leu Asp
465             470             475             480
```

1082

Glu Trp Leu Thr Leu Glu Asp Val Pro Ser Gly Arg Leu His Leu Arg
            485   490   495

Leu Glu Arg Leu Thr Pro Arg Pro Thr Ala Ala Glu Leu Glu Glu Val
            500   505   510

Leu Gln Val Asn Ser Leu Ile Gln Thr Gln Lys Ser Ala Glu Leu Ala
            515   520   525

Ala Ala Leu Leu Ser Ile Tyr Met Glu Arg Ala Glu Asp Leu Pro Leu
        530   535   540

Arg Lys Gly Thr Lys His Leu Ser Pro Tyr Ala Thr Leu Thr Val Gly
545   550   555   560

Asp Ser Ser His Lys Thr Lys Thr Ile Ser Gln Thr Ser Ala Pro Val
                565   570   575

Trp Asp Glu Ser Ala Ser Phe Leu Ile Arg Lys Pro His Thr Glu Ser
            580   585   590

Leu Glu Leu Gln Val Arg Gly Glu Gly Thr Gly Val Leu Gly Ser Leu
            595   600   605

Ser Leu Pro Leu Ser Glu Leu Leu Val Ala Asp Gln Leu Cys Leu Asp
        610   615   620

Arg Trp Phe Thr Leu Ser Ser Gly Gln Gly Gln Val Leu Leu Arg Ala
625   630   635   640

Gln Leu Gly Ile Leu Val Ser Gln His Ser Gly Val Glu Ala His Ser
                645   650   655

His Ser Tyr Ser His Ser Ser Ser Ser Leu Ser Glu Glu Pro Glu Leu
                660   665   670

Ser Gly Gly Pro Xaa His Ile Thr Ser Ser Ala Pro Glu Leu Arg Gln
            675   680   685

Arg Leu Thr His Val Asp Ser Pro Leu Glu Ala Pro Ala Gly Pro Leu
        690   695   700

Gly Gln Val Lys Leu Thr Leu Trp Tyr Tyr Ser Glu Glu Arg Lys Leu
705   710   715   720

Val Ser Ile Val His Gly Cys Arg Ser Leu Arg Gln Asn Gly Arg Asp
                725   730   735

Pro Pro Asp Pro Tyr Val Ser Leu Leu Leu Leu Pro Asp Lys Asn Arg
            740   745   750

```
Gly Thr Lys Arg Arg Thr Ser Gln Lys Lys Arg Thr Leu Ser Pro Glu
        755                 760                 765

Phe Asn Glu Arg Phe Glu Trp Glu Leu Pro Leu Asp Glu Ala Gln Arg
    770                 775                 780

Arg Lys Leu Asp Val Ser Val Lys Ser Asn Ser Ser Phe Met Ser Arg
785                 790                 795                 800

Glu Arg Glu Leu Leu Gly Lys Val Gln Leu Asp Leu Ala Glu Thr Asp
                805                 810                 815

Leu Ser Gln Gly Val Ala Arg Trp Tyr Asp Leu Met Asp Asn Lys Asp
                820                 825                 830

Lys Gly Ser Ser
            835
```

```
<210> 1089
<211> 409
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (393)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (406)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1089
Arg Ser Ser Val Ala Ser Val His Thr Trp Arg Gln Arg Arg Gln Val
  1                 5                  10                  15

Xaa Val Phe Val Leu Pro Ser Thr Ala Asn Met Lys Arg Pro Lys Leu
            20                  25                  30
```

```
Lys Lys Ala Ser Lys Arg Met Thr Cys His Lys Arg Tyr Lys Ile Gln
        35                  40                  45

Lys Lys Val Arg Glu His His Arg Lys Leu Arg Lys Glu Ala Lys Lys
    50                  55                  60

Xaa Gly His Lys Lys Pro Arg Lys Asp Pro Gly Val Pro Asn Ser Ala
65              70                  75                      80

Pro Phe Lys Glu Ala Leu Leu Arg Glu Ala Glu Leu Arg Lys Gln Arg
            85                  90                  95

Leu Glu Glu Leu Lys Gln Gln Gln Lys Leu Asp Arg Gln Lys Glu Leu
            100                 105                 110

Glu Lys Lys Arg Lys Leu Glu Thr Asn Pro Asp Ile Lys Pro Ser Asn
        115                 120                 125

Val Glu Pro Met Glu Lys Glu Phe Gly Leu Cys Lys Thr Glu Asn Lys
    130                 135                 140

Ala Lys Ser Gly Lys Gln Asn Ser Lys Lys Leu Tyr Cys Gln Glu Leu
145                 150                 155                 160

Lys Lys Val Ile Glu Ala Ser Asp Val Val Leu Glu Val Leu Asp Ala
            165                 170                 175

Arg Asp Pro Leu Gly Cys Arg Cys Pro Gln Val Glu Glu Ala Ile Val
            180                 185                 190

Gln Ser Gly Gln Lys Lys Leu Val Leu Ile Leu Asn Lys Ser Asp Leu
    195                 200                 205

Val Pro Lys Glu Asn Leu Glu Ser Trp Leu Asn Tyr Leu Lys Lys Glu
    210                 215                 220

Leu Pro Thr Val Val Phe Arg Ala Ser Thr Lys Pro Lys Asp Lys Gly
225                 230                 235                 240

Lys Ile Thr Lys Arg Val Lys Ala Lys Lys Asn Ala Ala Pro Phe Arg
            245                 250                 255

Ser Glu Val Cys Phe Gly Lys Glu Gly Leu Trp Lys Leu Leu Gly Gly
            260                 265                 270

Phe Gln Glu Thr Cys Ser Lys Ala Ile Arg Val Gly Val Ile Gly Phe
    275                 280                 285

Pro Asn Val Gly Lys Ser Ser Ile Ile Asn Ser Leu Lys Gln Glu Gln
    290                 295                 300
```

```
Met Cys Asn Val Gly Val Ser Met Gly Leu Thr Arg Ser Met Gln Val
305                 310                 315                 320

Val Pro Leu Asp Lys Gln Ile Thr Ile Ile Asp Ser Pro Ser Phe Ile
                325                 330                 335

Val Ser Pro Leu Asn Ser Ser Ser Ala Leu Ala Leu Arg Ser Pro Ala
                340                 345                 350

Ser Ile Glu Val Val Lys Pro Met Glu Ala Ala Ser Ala Ile Leu Ser
                355                 360                 365

Gln Ala Asp Ala Arg Gln Val Val Leu Lys Tyr Thr Val Pro Gly Tyr
    370                 375                 380

Arg Asn Ser Leu Gly Ile Phe Tyr Xaa Ala Cys Ser Glu Lys Arg Tyr
385                 390                 395                 400

Ala Pro Lys Arg Trp Xaa Pro Lys Cys
                405
```

<210> 1090
<211> 161
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1090
```
Pro Lys Asn Trp Xaa Thr Ala Arg Ala Asp His His Ala Ser Met Asn
  1               5                 10                  15

Trp Val Pro Cys Gly His Ser Tyr Phe Gly Ala Thr Leu Asn Ser Phe
                20                  25                  30

Ile His Val Leu Met Tyr Ser Tyr Tyr Gly Leu Ser Ser Val Pro Ser
                35                  40                  45

Met Arg Pro Tyr Leu Trp Trp Xaa Glu Val His His Ser Gly Ala Ala
    50                  55                  60
```

1086

```
Ala Ser Val Cys Ala Asp Asn His Pro Asp Gln Leu Arg Gly His Leu
 65                  70              75                  80

Ala Val His Ile Pro Ser Trp Leu Val Val Phe Pro Asp Trp Ile His
                 85              90              95

Asp Phe Pro Asp Cys Ser Leu His Lys Leu Leu His Ser Asp Leu Gln
             100             105             110

Gln Glu Arg Gly Leu Pro Lys Glu Arg Pro Pro Glu Gly Pro Pro Glu
             115             120             125

Trp Val His Gly Cys Cys Glu Trp Thr His Gln Gln Leu Phe Thr Pro
         130             135             140

Gly Lys Gln Cys Glu Ala Lys Glu Ala Ala Glu Gly Leu Lys Ser Lys
145             150             155             160

Asn
```

```
<210> 1091
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1091
Ser Lys Asn Ser Ala Arg Glu Glu Met Ala Ala Ser Ser Ser Ser Ser
 1               5               10              15

Ser Ala Gly Gly Val Ser Gly Ser Ser Val Thr Gly Ser Gly Phe Ser
             20              25              30

Val Ser Asp Leu Ala Pro Pro Arg Lys Ala Leu Phe Thr Tyr Pro Lys
         35              40              45

Gly Ala Gly Glu Met Leu Glu Asp Gly Ser Glu Arg Phe Leu Cys Glu
     50              55              60

Ser Val Phe Ser Tyr Gln Val Ala Ser Thr Leu Lys Gln Val Lys His
 65              70              75              80

Asp Gln Gln Val Ala Arg Met Glu Lys Leu Ala Gly Leu Val Glu Glu
             85              90              95

Leu Glu Ala Asp Glu Trp Arg Phe Lys Pro Ile Glu Gln Leu Leu Gly
             100             105             110
```

Phe Thr Pro Ser Ser Gly
          115

<210> 1092
<211> 198
<212> PRT
<213> Homo sapiens

<400> 1092
Ala Pro Phe Leu Ala Ala Gly Val Ser Met Gly Gly Met Leu Leu Leu
 1   5   10   15

Asn Tyr Leu Gly Lys Ile Gly Ser Lys Thr Pro Leu Met Ala Ala Ala
            20   25   30

Thr Phe Ser Val Gly Trp Asn Thr Phe Ala Cys Ser Glu Ser Leu Glu
            35   40   45

Lys Pro Leu Asn Trp Leu Leu Phe Asn Tyr Tyr Leu Thr Thr Cys Leu
      50   55   60

Gln Ser Ser Val Asn Lys His Arg His Met Phe Val Lys Gln Val Asp
 65   70   75   80

Met Asp His Val Met Lys Ala Lys Ser Ile Arg Glu Phe Asp Lys Arg
                85   90   95

Phe Thr Ser Val Met Phe Gly Tyr Gln Thr Ile Asp Asp Tyr Tyr Thr
            100   105   110

Asp Ala Ser Pro Ser Pro Arg Leu Lys Ser Val Gly Ile Pro Val Leu
            115   120   125

Cys Leu Asn Ser Val Asp Asp Val Phe Ser Pro Ser His Ala Ile Pro
      130   135   140

Ile Glu Thr Ala Lys Gln Asn Pro Asn Val Ala Leu Val Leu Thr Ser
145   150   155   160

Tyr Gly Gly His Ile Gly Phe Leu Glu Gly Ile Trp Pro Arg Gln Ser
                165   170   175

Thr Tyr Met Asp Arg Val Phe Lys Gln Phe Val Gln Ala Met Val Glu
            180   185   190

His Gly His Glu Leu Ser
      195

```
<210> 1093
<211> 36
<212> PRT
<213> Homo sapiens

<400> 1093
Pro Gly Trp Ser Arg Ser Pro Gly Trp Ser Arg Ser Pro Gly Trp Ser
 1               5                   10                  15


Arg Ser Pro Asp Val Val Ile His Pro Pro Arg Pro Pro Lys Met Leu
            20                  25                  30


Gly Leu Gln Val
            35
```

```
<210> 1094
<211> 615
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (156)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1094
Tyr Xaa Gln Leu Val Leu Leu Gln Val Pro Val Arg Ile Pro Gly Ser
 1   5   10   15

Thr His Ala Ser Xaa Asp Ala Trp Val Ala Arg Gln Leu Ala Lys Pro
             20   25   30

Asp Asn Thr Leu Phe Val Asn Arg Thr Leu Phe Asp Gln Val Leu Glu
         35   40   45

Phe Leu Cys Ser Pro Asp Asp Asp Ser Arg His Ser Glu Arg Gln Gln
     50   55   60

Val Leu Leu Glu Leu Leu Gln Ala Gly Gly Ile Val Gln Phe Glu Glu
 65   70   75   80

Ser Arg Leu Ile Arg Met Ala Glu Lys Ala Glu Phe Tyr Gln Ile Cys
             85   90   95

Glu Phe Met Tyr Glu Arg Glu His Gln Tyr Asp Lys Ile Ile Asp Cys
             100   105   110

Xaa Leu Arg Asp Pro Leu Arg Glu Glu Glu Val Phe Asn Tyr Ile His
         115   120   125

Asn Ile Leu Xaa Ile Pro Gly His Ser Ala Glu Glu Lys Gln Ser Val
     130   135   140

Trp Gln Lys Ala Met Asp His Ile Glu Glu Xaa Xaa Xaa Leu Lys Pro
145   150   155   160

Cys Lys Ala Ala Glu Leu Val Ala Thr His Phe Ser Gly His Ile Glu
             165   170   175

Thr Val Ile Lys Lys Leu Gln Asn Gln Val Leu Leu Phe Lys Phe Leu
             180   185   190

Arg Ser Leu Leu Asp Pro Arg Glu Gly Ile His Val Asn Gln Glu Leu
         195   200   205

Leu Gln Ile Ser Pro Cys Ile Thr Glu Gln Phe Ile Glu Leu Leu Cys
     210   215   220

Gln Phe Asn Pro Thr Gln Val Ile Glu Thr Leu Gln Val Leu Glu Cys

```
    225                 230                 235                 240

 Tyr Arg Leu Glu Glu Thr Ile Gln Ile Thr Gln Lys Tyr Gln Leu His
                 245                 250                 255

 Glu Val Thr Ala Tyr Leu Leu Glu Lys Lys Gly Asp Ile His Gly Ala
                 260                 265                 270

 Phe Leu Ile Met Leu Glu Arg Leu Gln Ser Lys Leu Gln Glu Val Thr
                 275                 280                 285

 His Gln Gly Glu Asn Thr Lys Glu Asp Pro Ser Leu Lys Asp Val Glu
                 290                 295                 300

 Asp Thr Met Val Glu Thr Ile Ala Leu Cys Gln Arg Asn Ser His Asn
 305                 310                 315                 320

 Leu Asn Gln Gln Gln Arg Glu Ala Leu Trp Phe Pro Leu Leu Glu Ala
                 325                 330                 335

 Met Met Ala Pro Gln Lys Leu Ser Ser Ser Ala Ile Pro His Leu His
                 340                 345                 350

 Ser Glu Ala Leu Lys Ser Leu Thr Met Gln Val Leu Asn Ser Met Ala
                 355                 360                 365

 Ala Phe Ile Ala Leu Pro Ser Ile Leu Gln Arg Ile Leu Gln Asp Pro
                 370                 375                 380

 Val Tyr Gly Lys Gly Lys Leu Gly Glu Ile Gln Gly Leu Ile Leu Gly
 385                 390                 395                 400

 Met Leu Asp Thr Phe Asn Tyr Glu Gln Thr Leu Leu Glu Thr Thr Thr
                 405                 410                 415

 Ser Leu Leu Asn Gln Asp Leu His Trp Ser Leu Cys Asn Leu Arg Ala
                 420                 425                 430

 Ser Val Thr Arg Gly Leu Asn Pro Lys Gln Asp Tyr Cys Ser Ile Cys
                 435                 440                 445

 Leu Gln Gln Tyr Lys Arg Arg Gln Glu Met Ala Asp Glu Ile Ile Val
                 450                 455                 460

 Phe Ser Cys Gly His Leu Tyr His Ser Phe Cys Leu Gln Asn Lys Glu
 465                 470                 475                 480

 Cys Thr Val Glu Phe Glu Gly Gln Thr Arg Trp Thr Cys Tyr Lys Cys
                 485                 490                 495

 Ser Ser Ser Asn Lys Val Gly Lys Leu Ser Glu Asn Ser Ser Glu Ile
```

```
                500                  505                  510

    Lys Lys Gly Arg Ile Thr Pro Ser Gln Val Lys Met Ser Pro Ser Tyr
            515                  520                  525

    His Gln Ser Lys Gly Asp Pro Thr Ala Lys Lys Gly Thr Ser Glu Pro
            530                  535                  540

    Val Leu Asp Pro Gln Gln Ile Gln Ala Phe Asp Gln Leu Cys Arg Leu
    545                  550                  555                  560

    Tyr Arg Gly Ser Ser Arg Leu Ala Leu Leu Thr Glu Leu Ser Gln Asn
                565                  570                  575

    Arg Ser Ser Glu Ser Tyr Arg Pro Phe Ser Gly Ser Gln Ser Ala Pro
                580                  585                  590

    Ala Phe Asn Ser Ile Phe Gln Asn Glu Asn Phe Gln Leu Gln Leu Ile
                595                  600                  605

    Pro Pro Pro Val Thr Glu Asp
        610                  615
```

```
<210> 1095
<211> 264
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1095
Trp Xaa Ser Thr Thr Ile Trp Lys Ala Gly Pro Pro Ala Gly Thr Gly
  1               5                  10                  15

Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Xaa Thr Arg Gly Phe Trp
            20                  25                  30

Phe Cys Ser Ser Val Trp Val Ser Ser Arg Leu Leu Lys Met Asn Arg
            35                  40                  45

Leu Phe Gly Lys Ala Lys Pro Lys Ala Pro Pro Pro Ser Leu Thr Asp
```

```
              50                   55                   60

 Cys Ile Gly Thr Val Asp Ser Arg Ala Glu Ser Ile Asp Lys Lys Ile
  65                   70                   75                   80

 Ser Arg Leu Asp Ala Glu Leu Val Lys Tyr Lys Asp Gln Ile Lys Lys
                  85                   90                   95

 Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys Ala Leu Arg
                 100                  105                  110

 Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp Asn Leu Ala
             115                  120                  125

 Gln Gln Ser Phe Asn Met Glu Gln Ala Asn Tyr Thr Ile Gln Ser Leu
             130                  135                  140

 Lys Asp Thr Lys Thr Thr Val Asp Ala Met Lys Leu Gly Val Lys Glu
 145                  150                  155                  160

 Met Lys Lys Ala Tyr Lys Gln Val Lys Ile Asp Gln Ile Glu Asp Leu
                 165                  170                  175

 Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile Gln Glu
             180                  185                  190

 Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp Asp Leu
             195                  200                  205

 Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp Glu Asp
     210                  215                  220

 Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro Glu Gly
 225                  230                  235                  240

 Val Pro Thr Asp Thr Lys Asn Lys Asp Gly Val Leu Val Asp Glu Phe
                 245                  250                  255

 Gly Leu Pro Gln Ile Pro Ala Ser
                 260
```

<210> 1096
<211> 244
<212> PRT
<213> Homo sapiens

<400> 1096
```
 Ser Cys Cys Phe Leu Lys Arg Leu Gln Ala Ser Phe Pro Arg Thr Ala
   1           5                   10                   15
```

1093

Val Ser Phe Glu Pro Leu Ala Gly Asp Met Pro Arg Gly Arg Lys Ser
              20   25   30

Arg Arg Arg Arg Asn Ala Arg Ala Ala Glu Glu Asn Arg Asn Asn Arg
          35   40   45

Lys Ile Gln Ala Ser Glu Ala Ser Glu Thr Pro Met Ala Ala Ser Val
      50   55   60

Val Ala Ser Thr Pro Glu Asp Asp Leu Ser Gly Pro Glu Glu Asp Pro
65   70   75   80

Ser Thr Pro Glu Glu Ala Ser Thr Thr Pro Glu Glu Ala Ser Ser Thr
              85   90   95

Ala Gln Ala Gln Lys Pro Ser Val Pro Arg Ser Asn Phe Gln Gly Thr
          100   105   110

Lys Lys Ser Leu Leu Met Ser Ile Leu Ala Leu Ile Phe Ile Met Gly
          115   120   125

Asn Ser Ala Lys Glu Ala Leu Val Trp Lys Val Leu Gly Lys Leu Gly
      130   135   140

Met Gln Pro Gly Arg Gln His Ser Ile Phe Gly Asp Pro Lys Lys Ile
145   150   155   160

Val Thr Glu Glu Phe Val Arg Arg Gly Tyr Leu Ile Tyr Lys Pro Val
              165   170   175

Pro Arg Ser Ser Pro Val Glu Tyr Glu Phe Phe Trp Gly Pro Arg Ala
          180   185   190

His Val Glu Ser Ser Lys Leu Lys Val Met His Phe Val Ala Arg Val
          195   200   205

Arg Asn Arg Cys Ser Lys Asp Trp Pro Cys Asn Tyr Asp Trp Asp Ser
      210   215   220

Asp Asp Asp Ala Glu Val Glu Ala Ile Leu Asn Ser Gly Ala Arg Gly
225   230   235   240

Tyr Ser Ala Pro

<210> 1097
<211> 132
<212> PRT

1094

<213> Homo sapiens

<400> 1097
Ala Thr Met Val Arg Met Asn Val Leu Ala Asp Ala Leu Lys Ser Ile
 1   5   10   15

Asn Asn Ala Glu Lys Arg Gly Lys Arg Gln Val Leu Ile Arg Pro Cys
                20   25   30

Ser Lys Val Ile Val Arg Phe Leu Thr Val Met Met Lys His Gly Tyr
        35   40   45

Ile Gly Glu Phe Glu Ile Ile Asp Asp His Arg Ala Gly Lys Ile Val
    50   55   60

Val Asn Leu Thr Gly Arg Leu Asn Lys Cys Gly Val Ile Ser Pro Arg
65   70   75   80

Phe Asp Val Gln Leu Lys Asp Leu Glu Lys Trp Gln Asn Asn Leu Leu
                85   90   95

Pro Ser Arg Gln Phe Gly Phe Ile Val Leu Thr Thr Ser Ala Gly Ile
                100   105   110

Met Asp His Glu Glu Ala Arg Arg Lys His Thr Gly Gly Lys Ile Leu
            115   120   125

Gly Phe Phe Phe
    130

<210> 1098
<211> 371
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1098
Ala Arg His Thr Pro Ala Gln Arg His Asp His Pro Gln Glu Gly Asn
 1   5   10   15

```
Ile Pro Val Cys Val Gln Leu Ala Val Cys Ala Leu Pro Leu Pro Val
            20                  25                  30

Val Pro Gly Pro Glu His Cys Gly Pro Gln Arg Xaa Leu Gln Pro Leu
            35                  40                  45

Val Tyr Pro Leu Ala Gln Val Ile Ile Gly Cys Ile Lys Leu Ile Pro
    50                  55                  60

Thr Ala Arg Phe Tyr Pro Leu Arg Met His Cys Ile Arg Ala Leu Thr
65                  70                  75                  80

Leu Leu Ser Gly Ser Ser Gly Ala Phe Ile Pro Val Leu Pro Phe Ile
                85                  90                  95

Leu Glu Met Phe Gln Gln Val Asp Phe Asn Arg Lys Pro Gly Arg Met
            100                 105                 110

Ser Ser Lys Pro Ile Asn Phe Ser Val Ile Leu Lys Leu Ser Asn Val
            115                 120                 125

Asn Leu Gln Glu Lys Ala Tyr Arg Asp Gly Leu Val Glu Gln Leu Tyr
    130                 135                 140

Asp Leu Thr Leu Glu Tyr Leu His Ser Gln Ala His Cys Ile Gly Phe
145                 150                 155                 160

Pro Glu Leu Val Leu Pro Val Val Leu Gln Leu Lys Ser Phe Leu Arg
            165                 170                 175

Glu Cys Lys Val Ala Asn Tyr Cys Arg Xaa Val Gln Gln Leu Leu Gly
            180                 185                 190

Lys Val Gln Glu Asn Ser Ala Tyr Ile Cys Ser Arg Arg Gln Arg Val
            195                 200                 205

Ser Phe Gly Val Ser Glu Gln Gln Ala Val Glu Ala Trp Glu Lys Leu
    210                 215                 220

Thr Arg Glu Glu Gly Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg
225                 230                 235                 240

Lys Leu Arg Asp Arg Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg
            245                 250                 255

Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys Met Ala Asp
            260                 265                 270

Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe Asp Leu Asn
    275                 280                 285
```

```
Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Ser Glu Arg Gly Ile Leu
    290             295         300
```

```
Arg Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu Glu Asp Glu
305             310             315             320
```

```
Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu Trp Ser Trp
            325             330             335
```

```
Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly Glu Leu Gln
            340             345             350
```

```
Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu Gln Leu Ser
        355             360             365
```

```
Glu Asp Asp
    370
```


<210> 1099
<211> 321
<212> PRT
<213> Homo sapiens

<400> 1099
```
Glu Arg Thr Leu Gly Gln Pro Gly Phe Leu Gly Cys Pro Arg Gln Pro
  1           5               10              15
```

```
His Thr Ala Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala
            20              25              30
```

```
Asn Gly Ala Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu
        35              40              45
```

```
Thr Leu Ala Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg
    50              55              60
```

```
Ile Leu Ala Arg Cys Asp Ile Met Val Leu Gln Glu Val Val Asp Ser
 65              70              75              80
```

```
Ser Gly Ser Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp
            85              90              95
```

```
Gly Ser Gly Pro Tyr Ser Thr Leu Ser Ser Pro Gln Leu Gly Arg Ser
            100             105             110
```

```
Thr Tyr Met Glu Thr Tyr Val Tyr Phe Tyr Arg Ser His Lys Thr Gln
        115             120             125
```

```
Val Leu Ser Ser Tyr Val Tyr Asn Asp Glu Asp Asp Val Phe Ala Arg
```

```
                130                    135                    140

Glu Pro Phe Val Ala Gln Phe Ser Leu Pro Ser Asn Val Leu Pro Ser
145                 150                 155                 160

Leu Val Leu Val Pro Leu His Thr Thr Pro Lys Ala Val Glu Lys Glu
                165                 170                 175

Leu Asn Ala Leu Tyr Asp Val Phe Leu Glu Val Ser Gln His Trp Gln
                180                 185                 190

Ser Lys Asp Val Ile Leu Leu Gly Asp Phe Asn Ala Asp Cys Ala Ser
                195                 200                 205

Leu Thr Lys Lys Arg Leu Asp Lys Leu Glu Leu Arg Thr Glu Pro Gly
    210                 215                 220

Phe His Trp Val Ile Ala Asp Gly Glu Asp Thr Thr Val Arg Ala Ser
225                 230                 235                 240

Thr His Cys Thr Tyr Asp Arg Val Val Leu His Gly Glu Arg Cys Arg
                245                 250                 255

Ser Leu Leu His Thr Ala Ala Ala Phe Asp Phe Pro Thr Ser Phe Gln
                260                 265                 270

Leu Thr Glu Glu Glu Ala Leu Asn Ile Ser Asp His Tyr Pro Val Glu
                275                 280                 285

Val Glu Leu Lys Leu Ser Gln Ala His Ser Val Gln Pro Leu Ser Leu
    290                 295                 300

Thr Val Leu Leu Leu Leu Ser Leu Leu Ser Pro Gln Leu Cys Pro Ala
305                 310                 315                 320

Ala
```

<210> 1100
<211> 60
<212> PRT
<213> Homo sapiens

<400> 1100
```
Leu Leu Leu Cys Val Phe Tyr Ile Ala Cys Phe Cys Lys Asn Met Leu
    1               5                   10                  15

Gly Asp Glu Arg Leu Val Leu Glu Arg Lys Cys Ser Ser Val Gln Arg
            20                  25                  30
```

```
Met His Phe Leu Pro Leu Ile Leu Glu Lys Thr Phe Thr Val Ile Tyr
        35                  40                  45

Met Val Phe Cys Lys Arg Thr Ile Asn Arg Thr Phe
        50                  55                  60
```

<210> 1101
<211> 254
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1101

```
Phe Gly Thr Ser Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr
 1               5               10                  15

Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu
            20                  25                  30

Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser
        35                  40                  45

Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile
    50                  55                  60

Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu
65                  70                  75                  80

Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys
                85                  90                  95

Val Leu Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu
            100                 105                 110

Ser Pro Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly Gly
        115                 120                 125

Leu Gly Asp Ser Phe Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser
    130                 135                 140
```

```
Gly Lys Thr Asp Met Glu Ala Lys Asn Met Tyr Tyr Glu Ala Leu Glu
145             150             155             160

Ala Xaa Arg Asp Leu Leu Ala Glu Cys Xaa Ser Arg Gly Ala Asp Leu
            165             170             175

His Cys Arg Val Ala Arg Gly Asp Ser Gly Pro Gln Asp Gly Ala Pro
            180             185             190

Gly Leu Phe Leu Arg Gly His Asp Arg Pro Trp Pro Glu Asp Ala Lys
        195             200             205

Glu Glu Lys Arg Ala His Tyr Arg Glu Leu Ala Ala Gln Ile Thr Lys
    210             215             220

Thr Cys His Glu Ser Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu
225             230             235             240

Ala Ser Gly Leu Thr Pro Ala Glu Arg Pro Trp Pro Pro Ser
            245             250
```

```
<210> 1102
<211> 233
<212> PRT
<213> Homo sapiens

<400> 1102
Gly Pro Gly Trp Tyr Pro Ala Pro Leu Arg Leu Phe His Ser Asp Pro
 1               5               10              15

Trp Gly His Ala Gln Pro Gly Ala Lys Arg His Arg Ile Pro Glu Pro
            20              25              30

Glu Ala Ala Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys
            35              40              45

His Gln His Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val
    50              55              60

Phe Ala Asp Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp
65              70              75              80

Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala
            85              90              95

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr
            100             105             110
```

1100

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr
        115   120   125

Met Leu Ala Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu
        130   135   140

Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser
145   150   155   160

Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala
                165   170   175

Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln
            180   185   190

Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala
        195   200   205

Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu
    210   215   220

Gly Asp Arg Glu Val Val Leu Tyr Gly
225   230

<210> 1103
<211> 330
<212> PRT
<213> Homo sapiens

<400> 1103
Cys Gln Leu Arg Ser Ala Ala Gly Val Pro Ser Ser Val Ser Val Ser
1   5   10   15

Pro Arg Asp Pro Ile Ala Met Glu Leu Ser Asp Ala Asn Leu Gln Thr
            20   25   30

Leu Thr Glu Tyr Leu Lys Lys Thr Leu Asp Pro Asp Pro Ala Ile Arg
        35   40   45

Arg Pro Ala Glu Lys Phe Leu Glu Ser Val Glu Gly Asn Gln Asn Tyr
    50   55   60

Pro Leu Leu Leu Leu Thr Leu Leu Glu Lys Ser Gln Asp Asn Val Ile
65   70   75   80

Lys Val Cys Ala Ser Val Thr Phe Lys Asn Tyr Ile Lys Arg Asn Trp
                85   90   95

Arg Ile Val Glu Asp Glu Pro Asn Lys Ile Cys Glu Ala Asp Arg Val

1101

```
              100                    105                    110

Ala Ile Lys Ala Asn Ile Val His Leu Met Leu Ser Ser Pro Glu Gln
        115                    120                    125

Ile Gln Lys Gln Leu Ser Asp Ala Ile Ser Ile Ile Gly Arg Glu Asp
        130                    135                    140

Phe Pro Gln Lys Trp Pro Asp Leu Leu Thr Glu Met Val Asn Arg Phe
145                    150                    155                    160.

Gln Ser Gly Asp Phe His Val Ile Asn Gly Val Leu Arg Thr Ala His
                165                    170                    175

Ser Leu Phe Lys Arg Tyr Arg His Glu Phe Lys Ser Asn Glu Leu Trp
                180                    185                    190

Thr Glu Ile Lys Leu Val Leu Asp Ala Phe Ala Leu Pro Leu Thr Asn
        195                    200                    205

Leu Phe Lys Ala Thr Ile Glu Leu Cys Ser Thr His Ala Asn Asp Ala
        210                    215                    220

Ser Ala Leu Arg Ile Leu Phe Ser Ser Leu Ile Leu Ile Ser Lys Leu
225                    230                    235                    240

Phe Tyr Ser Leu Asn Phe Gln Asp Leu Pro Glu Phe Phe Glu Asp Asn
                245                    250                    255

Met Glu Thr Trp Met Asn Asn Phe His Thr Leu Leu Thr Leu Asp Asn
                260                    265                    270

Lys Leu Leu Gln Thr Asp Asp Glu Glu Glu Ala Gly Leu Leu Glu Leu
        275                    280                    285

Leu Lys Ser Gln Ile Cys Asp Asn Ala Ala Leu Tyr Ala Gln Lys Tyr
        290                    295                    300

Asp Glu Glu Phe Gln Arg Tyr Leu Pro Arg Phe Val Thr Ala Ile Trp
305                    310                    315                    320

Glu Phe Thr Ser Tyr Asn Gly Ser Arg Gly
                325                    330
```

<210> 1104
<211> 180
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1104
Gly Thr Ser Pro Gly Arg Gly Gly Xaa Gly Val Gly Leu Arg Gly Leu
 1               5                  10                  15

Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro Met Ala
            20                  25                  30

Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro Ala Ala
            35                  40                  45

Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe Gln Arg
    50                  55                  60

Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu Gln Gln
65                  70                  75                  80
```

```
Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr Val Arg
                 85                  90                  95

Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val Asn Phe
                100                 105                 110

Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln Asn Val
            115                 120                 125

Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys Asn Glu
    130                 135                 140

Leu Lys Gln Ala Leu Xaa Val Ser Ala Thr Gly Ser Leu Thr Ser Ser
145                 150                 155                 160

Thr Thr Ser Ser Phe Glu Xaa Leu Thr Gly Xaa Gly Arg Gly Xaa Ser
                165                 170                 175

Xaa Ser Thr Xaa
            180




<210> 1105
<211> 241
<212> PRT
<213> Homo sapiens

<400> 1105
Thr Thr Arg Phe Pro Ser Gly Gln Pro Leu Lys Pro Arg Pro Thr Leu
  1               5                  10                  15

Thr Ala Ala Gly Pro Arg Pro Gly Leu Leu Cys Phe Thr Ile Tyr Ile
                20                  25                  30

Met Asn Pro Ser Met Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile
            35                  40                  45

Lys Asn Ser Ser Val Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser
    50                  55                  60

Ala Ser Gly Ser Leu Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu
65                  70                  75                  80

Ser Lys Arg Lys His Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser
                85                  90                  95

Pro Gly Val Ile Val Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly
            100                 105                 110

Val Thr Gln Glu Ser Phe Asp Leu Met Ile Lys Glu Asn Pro Ser Ser
```

```
                115              120              125

    Gln Tyr Trp Lys Glu Val Ala Glu Lys Arg Arg Lys Ala Leu Tyr Glu
        130              135              140

    Ala Leu Lys Glu Asn Glu Lys Leu His Lys Glu Ile Glu Gln Lys Asp
    145              150              155              160

    Asn Glu Ile Ala Arg Leu Lys Lys Glu Asn Lys Glu Leu Ala Glu Val
                    165              170              175

    Ala Glu His Val Gln Tyr Met Ala Glu Leu Ile Glu Arg Leu Asn Gly
                180              185              190

    Glu Pro Leu Asp Asn Phe Glu Ser Leu Asp Asn Gln Glu Phe Asp Ser
            195              200              205

    Glu Glu Glu Thr Val Glu Asp Ser Leu Val Glu Asp Ser Glu Ile Gly
        210              215              220

    Thr Cys Ala Glu Gly Thr Val Ser Ser Ser Thr Asp Ala Lys Pro Cys
    225              230              235              240

    Ile
```

```
<210> 1106
<211> 88
<212> PRT
<213> Homo sapiens

<400> 1106
    Phe His Thr Glu Phe Ile Thr Ile Trp Asp Val Arg Gln Cys Ser Asn
      1               5              10               15

    Lys His Cys Gln His Val Asn Phe Leu Lys Ser Val Gly His Ile Ala
                20              25              30

    Lys Asn Leu Leu Lys His Asn Cys Ile Phe Cys Phe Arg Ala Leu Leu
            35              40              45

    Met Phe Cys Arg Ser Asn Val Cys Ile Phe Leu Leu Asn Lys Leu Val
        50              55              60

    Leu Ile Leu Glu Leu Ser Asp Asp Phe Val Leu Glu Arg Thr Thr Gln
    65              70              75              80

    Arg Arg Gln Cys Lys Ser Lys Ser
                    85
```

<210> 1107
<211> 124
<212> PRT
<213> Homo sapiens

<400> 1107
Leu Val Val Leu Lys Arg Arg Pro Glu Lys Ser Gln Gly His Glu His
1   5   10   15

Arg Ala Met Pro Phe Leu Asp Ile Gln Lys Arg Phe Gly Leu Asn Ile
            20   25   30

Asp Arg Trp Leu Thr Ile Gln Ser Gly Glu Gln Pro Tyr Lys Met Ala
        35   40   45

Gly Arg Cys His Ala Phe Glu Lys Glu Trp Ile Glu Cys Ala His Gly
    50   55   60

Ile Gly Tyr Thr Arg Ala Glu Lys Glu Cys Lys Ile Glu Tyr Asp Asp
65   70   75   80

Phe Val Glu Cys Leu Leu Arg Gln Lys Thr Met Arg Arg Ala Gly Thr
                85   90   95

Ile Arg Lys Gln Arg Asp Lys Leu Ile Lys Glu Gly Lys Tyr Thr Pro
            100   105   110

Pro Pro His His Ile Gly Lys Gly Glu Pro Arg Pro
        115   120

<210> 1108
<211> 299
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1108

1106

```
His Leu Leu Cys Cys Arg Ala Gln Arg Arg Pro Gln Thr Pro Pro Ala
 1           5                10                15

Ala Arg Gly Leu Glu Pro Ala Gln Arg Cys Phe Glu Asp Ala Gly Xaa
             20                25                30

Pro Pro Leu Leu Leu Ala Ala Val Leu Leu Gly Leu Val Leu Leu Val
         35                40                45

Val Leu Leu Leu Leu Leu Arg His Trp Gly Trp Gly Leu Cys Leu Ile
     50                55                60

Gly Trp Asn Glu Phe Ile Leu Gln Pro Ile His Asn Leu Leu Met Gly
 65                70                75                80

Asp Thr Lys Glu Gln Arg Ile Leu Asn His Val Leu Gln His Ala Glu
             85                90                95

Pro Gly Asn Ala Gln Ser Val Leu Glu Ala Ile Asp Thr Tyr Cys Glu
             100               105               110

Gln Lys Glu Trp Ala Met Asn Val Gly Asp Lys Lys Gly Lys Ile Val
         115               120               125

Asp Ala Val Ile Gln Glu His Gln Pro Ser Val Leu Leu Glu Leu Gly
     130               135               140

Ala Tyr Cys Gly Tyr Ser Ala Val Arg Met Ala Arg Leu Leu Ser Pro
145               150               155               160

Gly Ala Arg Leu Ile Thr Ile Glu Ile Asn Pro Asp Cys Ala Ala Ile
             165               170               175

Thr Gln Arg Met Val Asp Phe Ala Gly Xaa Lys Asp Lys Val Thr Leu
             180               185               190

Val Val Gly Ala Ser Gln Asp Ile Ile Pro Gln Leu Lys Lys Lys Tyr
         195               200               205

Asp Val Asp Thr Leu Asp Met Val Phe Leu Asp His Trp Lys Asp Arg
     210               215               220

Tyr Leu Pro Asp Thr Leu Leu Leu Glu Glu Cys Gly Leu Leu Arg Lys
225               230               235               240

Gly Thr Val Leu Leu Ala Asp Asn Val Ile Cys Pro Gly Ala Pro Asp
             245               250               255

Phe Leu Ala His Val Arg Gly Ser Ser Cys Phe Glu Cys Thr His Tyr
         260               265               270
```

```
Gln Ser Phe Leu Glu Tyr Arg Glu Val Val Asp Gly Leu Glu Lys Ala
        275             280             285

Ile Tyr Lys Gly Pro Gly Ser Glu Ala Gly Pro
        290             295
```

<210> 1109
<211> 300
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1109

```
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Leu Arg Asp Leu
  1         5               10              15

Leu Thr Arg Arg Leu Thr Gly Ser Asn Tyr Pro Gly Leu Ser Ile Ser
            20              25              30

Leu Arg Leu Thr Gly Ser Ser Ala Gln Glu Xaa Ala Ser Gly Val Ala
        35              40              45

Leu Gly Glu Ala Pro Asp His Ser Tyr Glu Ser Leu Arg Val Thr Ser
    50              55              60

Ala Gln Lys His Val Leu His Val Gln Leu Asn Arg Pro Asn Lys Arg
 65                  70              75                  80

Asn Ala Met Asn Lys Val Phe Trp Arg Glu Met Val Glu Cys Phe Asn
                85              90                  95

Lys Ile Ser Arg Asp Ala Asp Cys Arg Ala Val Val Ile Ser Gly Ala
            100             105             110

Gly Lys Met Phe Thr Ala Gly Ile Asp Leu Met Asp Met Ala Ser Asp
        115             120             125

Ile Leu Gln Pro Lys Gly Asp Asp Val Ala Arg Ile Ser Trp Tyr Leu
    130             135             140

Arg Asp Ile Ile Thr Arg Tyr Gln Glu Thr Phe Asn Val Ile Glu Arg
145             150             155             160

Cys Pro Lys Pro Val Ile Ala Ala Val His Gly Gly Cys Ile Gly Gly
            165             170             175
```

```
Gly Val Asp Leu Val Thr Ala Cys Asp Ile Arg Tyr Cys Ala Gln Asp
            180                 185                 190

Ala Phe Phe Gln Val Lys Glu Val Asp Val Gly Leu Ala Ala Asp Val
            195                 200                 205

Gly Thr Leu Gln Arg Leu Pro Lys Val Ile Gly Asn Gln Ser Leu Val
    210                 215                 220

Asn Glu Leu Ala Phe Thr Ala Arg Lys Met Met Ala Asp Glu Ala Leu
225                 230                 235                 240

Gly Ser Gly Leu Val Ser Arg Val Phe Pro Asp Lys Glu Val Met Leu
                245                 250                 255

Asp Ala Ala Leu Ala Leu Ala Ala Glu Ile Ser Ser Lys Ser Pro Val
            260                 265                 270

Ala Cys Arg Ala Pro Arg Ser Thr Cys Cys Ile Pro Ala Thr Ile Arg
            275                 280                 285

Trp Pro Arg Ala Ser Thr Thr Trp Arg Pro Gly Thr
    290                 295                 300
```

<210> 1110
<211> 230
<212> PRT
<213> Homo sapiens

<400> 1110
```
Arg Ser Cys Ala Leu Val Cys Lys His Trp Tyr Arg Cys Leu His Gly
    1           5                 10                  15

Asp Glu Asn Ser Glu Val Trp Arg Ser Leu Cys Ala Arg Ser Leu Ala
            20                  25                  30

Glu Glu Ala Leu Arg Thr Asp Ile Leu Cys Asn Leu Pro Ser Tyr Lys
            35                  40                  45

Ala Lys Ile Arg Ala Phe Gln His Ala Phe Ser Thr Asn Asp Cys Ser
    50                  55                  60

Arg Asn Val Tyr Ile Lys Lys Asn Gly Phe Thr Leu His Arg Asn Pro
65                  70                  75                  80

Ile Ala Gln Ser Thr Asp Gly Ala Arg Thr Lys Ile Gly Phe Ser Glu
                85                  90                  95
```

```
Gly Arg His Ala Trp Glu Val Trp Trp Glu Gly Pro Leu Gly Thr Val
        100             105         110

Ala Val Ile Gly Ile Ala Thr Lys Arg Ala Pro Met Gln Cys Gln Gly
        115             120         125

Tyr Val Ala Leu Leu Gly Ser Asp Asp Gln Ser Trp Gly Trp Asn Leu
    130             135         140

Val Asp Asn Asn Leu Leu His Asn Gly Glu Val Asn Gly Ser Phe Pro
145             150             155         160

Gln Cys Asn Asn Ala Pro Lys Tyr Gln Ile Gly Glu Arg Ile Arg Val
            165             170             175

Ile Leu Asp Met Glu Asp Lys Thr Leu Ala Phe Glu Arg Gly Tyr Glu
        180             185         190

Phe Leu Gly Val Ala Phe Arg Gly Leu Pro Lys Val Cys Leu Tyr Pro
        195             200         205

Ala Val Ser Ala Val Tyr Gly Asn Thr Glu Val Thr Leu Val Tyr Leu
    210             215             220

Gly Lys Pro Leu Asp Gly
225             230
```

<210> 1111
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1111
Pro Xaa Leu Thr Lys Gly Asn Lys Ser Trp Xaa Ser Thr Ala Val Xaa

1110

```
     1                 5                   10                  15
   Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Pro
               20                  25                  30

   Gln Lys Asn Leu Lys Asn Thr Val Phe Cys Ile Asp Ile Cys Thr Val
               35                  40                  45

   Cys Val Cys Val Cys Glu Ile Lys Ile Arg Phe
           50                  55
```

<210> 1112
<211> 425
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1112
```
   Cys Ile Xaa Gly Phe Tyr Phe Ala Val Leu Ala Pro Gln Glu Leu Leu
     1                 5                   10                  15

   Ile Tyr Glu Met Ala Glu Asn Gly Lys Asn Cys Asp Gln Arg Arg Val
               20                  25                  30

   Ala Met Asn Lys Glu His His Asn Gly Asn Phe Thr Asp Pro Ser Ser
               35                  40                  45

   Val Asn Glu Lys Lys Arg Arg Glu Arg Glu Glu Arg Gln Asn Ile Val
           50                  55                  60

   Leu Trp Arg Gln Pro Leu Ile Thr Leu Gln Tyr Phe Ser Leu Glu Ile
   65                  70                  75                  80

   Leu Val Ile Leu Lys Glu Trp Xaa Ser Lys Leu Trp His Arg Gln Ser
                   85                  90                  95
```

1111

Ile Val Val Ser Phe Leu Leu Leu Leu Ala Val Leu Ile Ala Thr Tyr
            100   105   110

Tyr Val Glu Gly Val His Gln Gln Tyr Val Gln Arg Ile Glu Lys Gln
            115   120   125

Phe Leu Leu Tyr Ala Tyr Trp Ile Gly Leu Gly Ile Leu Ser Ser Val
    130   135   140

Gly Leu Gly Thr Gly Leu His Thr Phe Leu Leu Tyr Leu Gly Pro His
145   150   155   160

Ile Ala Ser Val Thr Leu Ala Ala Tyr Glu Cys Asn Ser Val Asn Phe
                165   170   175

Pro Glu Pro Pro Tyr Pro Asp Gln Ile Ile Cys Pro Asp Glu Glu Gly
            180   185   190

Thr Glu Gly Thr Ile Ser Leu Trp Ser Ile Ile Ser Lys Val Arg Ile
            195   200   205

Glu Ala Cys Met Trp Gly Ile Gly Thr Ala Ile Gly Glu Leu Pro Pro
    210   215   220

Tyr Phe Met Xaa Arg Ala Ala Arg Leu Ser Gly Ala Glu Pro Asp Asp
225   230   235   240

Glu Glu Tyr Gln Glu Phe Glu Glu Met Leu Glu His Ala Glu Ser Ala
            245   250   255

Gln Asp Phe Ala Ser Arg Ala Lys Leu Ala Val Gln Lys Leu Val Gln
            260   265   270

Lys Val Gly Phe Phe Gly Ile Leu Ala Cys Ala Ser Ile Pro Asn Pro
            275   280   285

Leu Phe Asp Leu Ala Gly Ile Thr Cys Gly His Phe Leu Val Pro Phe
    290   295   300

Trp Thr Phe Phe Gly Ala Thr Leu Ile Gly Lys Ala Ile Ile Lys Met
305   310   315   320

His Ile Gln Lys Ile Phe Val Ile Ile Thr Phe Ser Lys His Ile Val
            325   330   335

Glu Gln Met Val Ala Phe Ile Gly Ala Val Pro Gly Ile Gly Pro Ser
            340   345   350

Leu Gln Lys Pro Phe Gln Glu Tyr Leu Glu Ala Gln Arg Gln Lys Leu
            355   360   365

```
His His Lys Ser Glu Met Gly Thr Pro Gln Gly Glu Asn Trp Leu Ser
    370             375             380

Trp Met Phe Glu Lys Leu Val Val Val Met Val Cys Tyr Phe Ile Leu
385             390             395             400

Ser Ile Ile Asn Ser Met Ala Gln Ser Tyr Ala Lys Arg Ile Gln Gln
            405             410             415

Arg Leu Asn Ser Glu Glu Lys Thr Lys
            420             425
```

<210> 1113
<211> 254
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1113
```
Xaa Ile Glu Ile Asn Pro His Val Lys Gly Thr Lys Ala Gly Ala Pro
 ·1              5               10              15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu
            20              25              30

Phe Gly Thr Ser Ser Ser Thr Pro Ala Arg Pro Ser Ser His His Ser
            35              40              45

Ala Cys Phe Leu Gly Pro Glu Ile Met Pro Leu Gly Leu Leu Trp Leu
    50              55              60

Gly Leu Ala Leu Leu Gly Ala Leu His Ala Gln Ala Gln Asp Ser Thr
65              70              75              80

Ser Asp Leu Ile Pro Ala Pro Pro Leu Ser Lys Val Pro Leu Gln Gln
            85              90              95

Asn Phe Gln Asp Asn Gln Phe Gln Gly Lys Trp Tyr Val Val Gly Leu
            100             105             110

Ala Gly Asn Ala Ile Leu Arg Glu Asp Lys Asp Pro Gln Lys Met Tyr
            115             120             125

Ala Thr Ile Tyr Glu Leu Lys Glu Asp Lys Ser Tyr Asn Val Thr Ser
```

1113

```
        130                    135                    140

   Val Leu Phe Arg Lys Lys Lys Cys Asp Tyr Trp Ile Arg Thr Phe Val
   145                 150                 155                 160

   Pro Gly Cys Gln Pro Gly Glu Phe Thr Leu Gly Asn Ile Lys Ser Tyr
                 165                 170                 175

   Pro Gly Leu Thr Ser Tyr Leu Val Arg Val Val Ser Thr Asn Tyr Asn
                 180                 185                 190

   Gln His Ala Met Val Phe Phe Lys Lys Val Ser Gln Asn Arg Glu Tyr
                 195                 200                 205

   Phe Lys Ile Thr Leu Tyr Gly Arg Thr Lys Glu Leu Thr Ser Glu Leu
             210                 215                 220

   Lys Glu Asn Phe Ile Arg Phe Ser Lys Ser Leu Gly Leu Pro Glu Asn
   225                 230                 235                 240

   His Ile Val Phe Pro Val Pro Ile Asp Gln Cys Ile Asp Gly
                 245                 250
```

```
<210> 1114
<211> 248
<212> PRT
<213> Homo sapiens

<400> 1114
Ala Ser Glu Glu Ala Asn Pro Ala Gly Ile Arg Ala Ile Arg Thr Ala
  1               5                  10                  15

Thr Met Thr Val Gly Lys Ser Ser Lys Met Leu Gln His Ile Asp Tyr
            20                  25                  30

Arg Met Arg Cys Ile Leu Gln Asp Gly Arg Ile Phe Ile Gly Thr Phe
         35                  40                  45

Lys Ala Phe Asp Lys His Met Asn Leu Ile Leu Cys Asp Cys Asp Glu
     50                  55                  60

Phe Arg Lys Ile Lys Pro Lys Asn Ser Lys Gln Ala Glu Arg Glu Glu
 65                  70                  75                  80

Lys Arg Val Leu Gly Leu Val Leu Leu Arg Gly Glu Asn Leu Val Ser
             85                  90                  95

Met Thr Val Glu Gly Pro Pro Pro Lys Asp Thr Gly Ile Ala Arg Val
         100                 105                 110
```

```
Pro Leu Ala Gly Ala Ala Gly Gly Pro Gly Ile Gly Arg Ala Ala Gly
        115             120             125

Arg Gly Ile Pro Ala Gly Val Pro Met Pro Gln Ala Pro Ala Gly Leu
        130             135             140

Ala Gly Pro Val Arg Gly Val Gly Gly Pro Ser Gln Gln Val Met Thr
145             150             155             160

Pro Gln Gly Arg Gly Thr Val Ala Ala Ala Ala Ala Ala Thr Ala
            165             170             175

Ser Ile Ala Gly Ala Pro Thr Gln Tyr Pro Pro Gly Arg Gly Gly Pro
        180             185             190

Pro Pro Pro Met Gly Arg Gly Ala Pro Pro Pro Gly Met Met Gly Pro
        195             200             205

Pro Pro Gly Met Arg Pro Pro Met Gly Pro Pro Met Gly Ile Pro Pro
    210             215             220

Gly Arg Gly Thr Pro Met Gly Met Pro Pro Pro Gly Met Arg Pro Pro
225             230             235             240

Pro Pro Gly Met Arg Gly Leu Leu
                245
```

```
<210> 1115
<211> 777
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1115
Leu Thr Lys Gly Xaa Lys Ser Trp Xaa Ser Thr Ala Val Xaa Thr Ala
 1   5   10   15

Leu Glu Leu Val Xaa Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Xaa
            20   25   30

Pro Pro Leu Gly Ser Ser Pro Leu Gly Arg Arg Phe Arg Val Leu Ser
        35   40   45

Ser Leu Arg Arg Ser Pro Met Phe Glu Glu Lys Ala Ser Ser Pro Ser
    50   55   60

Gly Lys Met Gly Gly Glu Glu Lys Pro Ile Gly Ala Gly Glu Glu Lys
65   70   75   80

Gln Lys Glu Gly Gly Lys Lys Lys Asn Lys Glu Gly Ser Gly Asp Gly
            85   90   95

Gly Arg Ala Glu Leu Asn Pro Trp Pro Glu Tyr Ile Tyr Thr Arg Leu
        100   105   110

Glu Met Tyr Asn Ile Leu Lys Ala Glu His Asp Ser Ile Leu Ala Glu
        115   120   125

Lys Ala Glu Lys Asp Ser Lys Pro Ile Lys Val Thr Leu Pro Asp Gly
    130   135   140

Lys Gln Val Asp Ala Glu Ser Trp Lys Thr Thr Pro Tyr Gln Ile Ala
145   150   155   160

Cys Gly Ile Ser Gln Gly Leu Ala Asp Asn Thr Val Ile Ala Lys Val
            165   170   175

Asn Asn Val Val Trp Asp Leu Asp Arg Pro Leu Glu Glu Asp Cys Thr
            180   185   190

Leu Glu Leu Leu Lys Phe Glu Asp Glu Glu Ala Gln Ala Val Tyr Trp
        195   200   205

His Ser Ser Ala His Ile Met Gly Glu Ala Met Glu Arg Val Tyr Gly
    210   215   220

```
Gly Cys Leu Cys Tyr Gly Pro Pro Ile Glu Asn Gly Phe Tyr Tyr Asp
225             230             235             240

Met Tyr Leu Glu Glu Gly Gly Val Ser Ser Asn Asp Phe Ser Ser Leu
                245             250             255

Glu Ala Leu Cys Lys Lys Ile Ile Lys Glu Lys Gln Ala Phe Glu Arg
            260             265             270

Leu Glu Val Lys Lys Glu Thr Leu Leu Ala Met Phe Lys Tyr Asn Lys
            275             280             285

Phe Lys Cys Arg Ile Leu Asn Glu Lys Val Asn Thr Pro Thr Thr Thr
    290             295             300

Val Tyr Arg Cys Gly Pro Leu Ile Asp Leu Cys Arg Gly Pro His Val
305             310             315             320

Arg His Thr Gly Lys Ile Lys Ala Leu Lys Ile His Lys Asn Ser Ser
            325             330             335

Thr Tyr Trp Glu Gly Lys Ala Asp Met Glu Thr Leu Gln Arg Ile Tyr
            340             345             350

Gly Ile Ser Phe Pro Asp Pro Lys Met Leu Lys Glu Trp Glu Lys Phe
            355             360             365

Gln Glu Glu Ala Lys Asn Arg Asp His Arg Lys Ile Gly Arg Asp Gln
    370             375             380

Glu Leu Tyr Phe Phe His Glu Leu Ser Pro Gly Ser Cys Phe Phe Leu
385             390             395             400

Pro Lys Gly Ala Tyr Ile Tyr Asn Ala Leu Ile Glu Phe Ile Arg Ser
            405             410             415

Glu Tyr Arg Lys Arg Gly Phe Gln Glu Val Val Thr Pro Asn Ile Phe
            420             425             430

Asn Ser Arg Leu Trp Met Thr Ser Gly His Trp Gln His Tyr Ser Glu
            435             440             445

Asn Met Phe Ser Phe Glu Val Glu Lys Glu Leu Phe Ala Leu Lys Pro
    450             455             460

Met Asn Cys Pro Gly His Cys Leu Met Phe Asp His Arg Pro Arg Ser
465             470                 475             480

Trp Arg Glu Leu Pro Leu Arg Leu Ala Asp Phe Gly Val Leu His Arg
            485             490             495
```

Asn Glu Leu Ser Gly Ala Leu Thr Gly Leu Thr Arg Val Arg Arg Phe
            500   505   510

Gln Gln Asp Asp Ala His Ile Phe Cys Ala Met Glu Gln Ile Glu Asp
            515   520   525

Glu Ile Lys Gly Cys Leu Asp Phe Leu Arg Thr Val Tyr Ser Val Phe
    530   535   540

Gly Phe Ser Phe Lys Leu Asn Leu Ser Thr Arg Pro Glu Lys Phe Leu
545   550   555   560

Gly Asp Ile Glu Val Trp Asp Gln Ala Glu Lys Gln Leu Glu Asn Ser
            565   570   575

Leu Asn Glu Phe Gly Glu Lys Trp Glu Leu Asn Ser Gly Asp Gly Ala
            580   585   590

Phe Tyr Gly Pro Lys Ile Asp Ile Gln Ile Lys Asp Ala Ile Gly Arg
            595   600   605

Tyr His Gln Cys Ala Thr Ile Gln Leu Asp Phe Gln Leu Pro Ile Arg
    610   615   620

Phe Asn Leu Thr Tyr Val Ser His Asp Gly Asp Asp Lys Lys Arg Pro
625   630   635   640

Val Ile Val His Arg Ala Ile Leu Gly Ser Val Glu Arg Met Ile Ala
            645   650   655

Ile Leu Thr Glu Asn Tyr Gly Gly Lys Trp Pro Phe Trp Leu Ser Pro
            660   665   670

Arg Gln Val Met Val Val Pro Val Gly Pro Thr Cys Asp Glu Tyr Ala
    675   680   685

Gln Lys Val Arg Gln Gln Phe His Asp Ala Lys Phe Met Ala Asp Ile
    690   695   700

Asp Leu Asp Pro Gly Cys Thr Leu Asn Lys Lys Ile Arg Asn Ala Gln
705   710   715   720

Leu Ala Gln Tyr Asn Phe Ile Leu Val Val Gly Glu Lys Glu Lys Ile
            725   730   735

Ser Gly Thr Val Asn Ile Arg Thr Arg Asp Asn Lys Val His Gly Glu
            740   745   750

Arg Thr Ile Ser Glu Thr Ile Glu Arg Leu Gln Gln Leu Lys Glu Phe
    755   760   765

```
Arg Ser Lys Gln Ala Glu Glu Glu Phe
    770                 775
```

<210> 1116
<211> 360
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1116

```
Thr Thr Ser Ala Xaa Arg Trp Asp Gly Thr Arg Gly Arg Thr Arg Gly
  1           5               10                  15

Arg Thr Xaa Gly Phe Gly Asn Leu Ser Ile Thr Gln Xaa Trp Met Met
            20              25              30

Trp Ala Met Val Ser Xaa Met Glu Ile Asp Gln Pro Ala Gly Thr Gly
        35              40                  45

Thr Leu Ser Arg Thr Asn Pro Pro Thr Gln Lys Pro Pro Ser Pro Pro
    50                  55                  60

Met Ser Gly Arg Gly Thr Leu Gly Arg Asn Thr Pro Tyr Lys Thr Leu
    65                  70                  75              80

Glu Pro Val Lys Pro Pro Thr Val Pro Asn Asp Tyr Met Thr Ser Pro
                    85                  90                  95

Ala Arg Leu Gly Ser Gln His Ser Pro Gly Arg Thr Ala Ser Leu Asn
```

1119

```
                      100                    105                    110
   Gln Arg Pro Arg Thr His Ser Gly Ser Ser Gly Gly Ser Gly Ser Arg
           115                120                125

   Glu Asn Ser Gly Ser Ser Ser Ile Gly Ile Pro Ile Ala Val Pro Thr
           130                135                140

   Pro Ser Pro Pro Thr Ile Gly Pro Ala Ala Pro Gly Ser Ala Pro Gly
   145                150                155                160

   Ser Gln Tyr Gly Thr Met Thr Arg Gln Ile Ser Arg His Asn Ser Thr
                   165                170                175

   Thr Ser Ser Thr Ser Ser Gly Gly Tyr Arg Arg Thr Pro Ser Val Thr
                   180                185                190

   Ala Gln Phe Ser Ala Gln Pro His Val Asn Gly Gly Pro Leu Tyr Ser
           195                200                205

   Gln Asn Ser Ile Ser Ile Ala Pro Pro Pro Pro Met Pro Gln Leu
           210                215                220

   Thr Pro Gln Ile Pro Leu Thr Gly Phe Val Ala Arg Val Gln Glu Asn
   225                230                235                240

   Ile Ala Asp Ser Pro Thr Pro Pro Pro Pro Pro Pro Asp Asp Ile
                   245                250                255

   Pro Met Phe Asp Asp Ser Pro Pro Pro Pro Pro Pro Pro Val Asp
                   260                265                270

   Tyr Glu Asp Glu Glu Ala Ala Val Val Gln Tyr Asn Asp Pro Tyr Ala
           275                280                285

   Asp Gly Asp Pro Ala Trp Ala Pro Lys Asn Tyr Ile Glu Lys Val Val
           290                295                300

   Ala Ile Tyr Asp Tyr Thr Lys Asp Lys Asp Asp Glu Leu Ser Phe Met
   305                310                315                320

   Glu Gly Ala Ile Ile Tyr Val Ile Lys Lys Asn Asp Asp Gly Trp Tyr
                   325                330                335

   Glu Gly Val Cys Asn Arg Val Thr Gly Leu Phe Pro Gly Asn Tyr Val
                   340                345                350

   Glu Ser Ile Met His Tyr Thr Asp
           355                360
```

```
<210> 1117
<211> 89
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1117
Pro Ala Arg Leu Gly Ile Thr Cys His Ser Pro Ala Ile Leu Ser Thr
 1               5                  10                  15

Ala Leu Trp Gly Gly Ser Ser Pro Ile Pro Asp Ala Pro Thr Thr Gln
                 20                  25                  30

Trp Lys Val Thr Lys Pro Ala Pro Cys Pro Arg Pro Arg Arg Val Glu
             35                  40                  45

Pro Val Cys Ser Gly Leu Gln Ala Gln Ile Leu His Cys Tyr Arg Asp
     50                  55                  60

Arg Pro His Glu Val Leu Leu Cys Ser Asp Leu Val Lys Ala Tyr Gln
 65                  70                  75                  80

Arg Cys Val Ser Ala Xaa His Lys Gly
                 85
```

```
<210> 1118
<211> 347
<212> PRT
<213> Homo sapiens

<400> 1118
Arg Gly Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu
 1               5                  10                  15

Met Leu Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val
                 20                  25                  30

Lys Lys Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn
             35                  40                  45

Tyr Lys Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile
     50                  55                  60

His Glu Asp Ser Thr Asn Arg Arg Arg Leu Ser Glu Leu Leu Arg Tyr
```

1121

```
        65                    70                    75                    80

    His Thr Ser Gln Ser Gly Asp Glu Met Thr Ser Leu Ser Glu Tyr Val
                    85                    90                    95

    Ser Arg Met Lys Glu Thr Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu
                    100                   105                   110

    Ser Lys Glu Gln Val Ala Asn Ser Ala Phe Val Glu Arg Val Arg Lys
                    115                   120                   125

    Arg Gly Phe Glu Val Val Tyr Met Thr Glu Pro Ile Asp Glu Tyr Cys
        130                   135                   140

    Val Gln Gln Leu Lys Glu Phe Asp Gly Lys Ser Leu Val Ser Val Thr
    145                   150                   155                   160

    Lys Glu Gly Leu Glu Leu Pro Glu Asp Glu Glu Glu Lys Lys Lys Met
                    165                   170                   175

    Glu Glu Ser Lys Ala Lys Phe Glu Asn Leu Cys Lys Leu Met Lys Glu
                    180                   185                   190

    Ile Leu Asp Lys Lys Val Glu Lys Val Thr Ile Ser Asn Arg Leu Val
                    195                   200                   205

    Ser Ser Pro Cys Cys Ile Val Thr Ser Thr Tyr Gly Trp Thr Ala Asn
        210                   215                   220

    Met Glu Arg Ile Met Lys Ala Gln Ala Leu Arg Asp Asn Ser Thr Met
    225                   230                   235                   240

    Gly Tyr Met Met Ala Lys Lys His Leu Glu Ile Asn Pro Asp His Pro
                    245                   250                   255

    Ile Val Glu Thr Leu Arg Gln Lys Ala Glu Ala Asp Lys Asn Asp Lys
                    260                   265                   270

    Ala Val Lys Asp Leu Val Val Leu Leu Phe Glu Thr Ala Leu Leu Ser
        275                   280                   285

    Ser Gly Phe Ser Leu Glu Asp Pro Gln Thr His Ser Asn Arg Ile Tyr
        290                   295                   300

    Arg Met Ile Lys Leu Gly Leu Gly Ile Asp Glu Asp Glu Val Ala Ala
    305                   310                   315                   320

    Glu Glu Pro Asn Ala Ala Val Pro Asp Glu Ile Pro Pro Leu Glu Gly
                    325                   330                   335

    Asp Glu Asp Ala Ser Arg Met Glu Glu Val Asp
```

1122

340   345

<210> 1119
<211> 293
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1119
Pro Gly Ser Pro Asp Val Asn Arg Ala Val Val Arg Pro Pro Pro Pro
 1   5   10   15

Pro Pro Pro Pro Pro Pro Ala Pro Gln Pro Thr Met Ser Arg Arg Lys
              20   25   30

Gln Gly Lys Pro Gln His Leu Ser Lys Arg Glu Phe Ser Pro Glu Pro
         35   40   45

Leu Glu Ala Ile Leu Thr Asp Asp Glu Pro Asp His Gly Pro Leu Gly
    50   55   60

Ala Pro Glu Gly Asp His Asp Leu Leu Thr Cys Gly Gln Cys Gln Met
65   70   75   80

Asn Phe Pro Leu Gly Asp Ile Leu Ile Phe Ile Glu His Lys Arg Lys
              85   90   95

Gln Cys Asn Gly Ser Leu Cys Leu Glu Lys Ala Val Asp Lys Pro Pro
              100   105   110

Ser Pro Ser Pro Ile Glu Met Lys Lys Ala Ser Asn Pro Val Glu Val
         115   120   125

Gly Ile Gln Val Thr Pro Glu Asp Asp Asp Cys Leu Ser Thr Ser Ser
    130   135   140

Arg Gly Ile Cys Pro Lys Gln Glu His Ile Ala Asp Lys Leu Leu His
145   150   155   160

Trp Arg Gly Leu Ser Ser Pro Arg Ser Xaa Thr Trp Ser Ser Asn Pro
              165   170   175

His Ala Trp Asp Glu Cys Arg Ile Cys Pro Ala Gly Ile Cys Lys Asp
              180   185   190

```
Glu Pro Ser Ser Tyr Thr Cys Thr Thr Cys Lys Gln Pro Phe Thr Ser
        195             200             205

Ala Trp Phe Leu Leu Gln His Ala Gln Asn Thr His Gly Leu Arg Ile
        210             215             220

Tyr Leu Glu Ser Glu His Gly Ser Pro Leu Thr Pro Arg Val Gly Ile
225             230             235             240

Pro Ser Gly Leu Gly Ala Glu Cys Pro Ser Gln Pro Pro Leu His Gly
            245             250             255

Ile His Ile Ala Asp Asn Asn Pro Phe Asn Leu Leu Arg Ile Pro Gly
            260             265             270

Ser Val Ser Arg Glu Ala Ser Gly Leu Gly Arg Arg Ala Leu Ser Thr
        275             280             285

His Ser Pro Pro Val
        290
```

```
<210> 1120
<211> 190
<212> PRT
<213> Homo sapiens

<400> 1120
Ala Ala Ala Ala Ala Gly Asp Pro Gly Ala Met Gly Arg Ala Arg Asp
 1               5               10              15

Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys
            20              25              30

Phe Lys Leu Lys Leu Leu Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg
        35              40              45

Ile Pro Arg Gly Ala Leu Leu Ser Met Asp Ala Leu Asp Leu Thr Asp
    50              55              60

Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala
65              70              75              80

Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln
            85              90              95

Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala
        100             105             110

Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His
```

1124

```
              115                   120                   125

    Arg Ala Ala Leu Ile Ala Arg Val Thr Asn Val Glu Trp Leu Leu Asp
        130                   135                   140

    Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg
    145                   150                   155                   160

    Pro Ser Pro Pro Thr Gln Ala Arg Cys Gly Ser Ser Ser Val Ser His
                      165                   170                   175

    Gln Pro Gly Thr Gly Pro Ala Arg Thr Cys Ser Ser Arg Pro
                      180                   185                   190
```

<210> 1121
<211> 217
<212> PRT
<213> Homo sapiens

<400> 1121
```
    Gly Arg Lys Trp Phe Cys Pro Tyr Lys Thr Trp Arg Lys Ala Phe Leu
    1               5                   10                  15

    Ser Pro Arg Lys Arg His Val Met Ser Gln Ser Cys Gly Ala Arg Ala
                  20                  25                  30

    Glu Val Gln Ala Thr Gly Ser Asp Gly Ala Pro Thr Lys Ala Leu Gly
              35                  40                  45

    Leu Val Arg Val Ala Ala Val Ser Ser Asp Ser Cys Val Val Pro Met
        50                  55                  60

    Val Glu Lys Lys Thr Ser Val Arg Ser Gln Asp Pro Gly Gln Arg Arg
    65                  70                  75                  80

    Val Leu Asp Arg Ala Ala Arg Gln Arg Arg Ile Asn Arg Gln Leu Glu
                  85                  90                  95

    Ala Leu Glu Asn Asp Asn Phe Gln Asp Asp Pro His Ala Gly Leu Pro
                  100                 105                 110

    Gln Leu Gly Lys Arg Leu Pro Gln Phe Asp Asp Asp Ala Asp Thr Gly
              115                 120                 125

    Lys Lys Lys Lys Lys Thr Arg Gly Asp His Phe Lys Leu Arg Phe Arg
        130                 135                 140

    Lys Asn Phe Gln Ala Leu Leu Glu Glu Gln Asn Leu Ser Val Ala Glu
    145                 150                 155                 160
```

```
Gly Pro Asn Tyr Leu Thr Ala Cys Ala Gly Pro Pro Ser Arg Pro Gln
            165             170             175

Arg Pro Phe Cys Ala Val Cys Gly Phe Pro Ser Pro Tyr Thr Cys Val
            180             185             190

Ser Cys Gly Ala Arg Tyr Cys Thr Val Arg Cys Leu Gly Thr His Gln
            195             200             205

Glu Thr Arg Cys Leu Lys Trp Thr Val
    210             215
```

```
<210> 1122
<211> 112
<212> PRT
<213> Homo sapiens

<400> 1122
Gly Asn Cys Gln Lys Cys Ala Phe Gly Tyr Ser Gly Leu Asp Cys Lys
 1               5               10              15

Asp Lys Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile
            20              25              30

Val Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn
            35              40              45

Asn Lys Thr Lys His Ile Glu Glu Glu Asn Leu Ile Asp Glu Asp Phe
    50              55              60

Gln Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu
65              70              75              80

Gly Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln
            85              90              95

Met Gln Asn Pro Tyr Ser Ser His Ser Ser Met Pro Arg Pro Asp Tyr
            100             105             110
```

```
<210> 1123
<211> 216
<212> PRT
<213> Homo sapiens
```

<400> 1123
Gly Lys Leu Val Cys Gly Met Val Ser Tyr Leu Asn Asp Leu Pro Ser
 1   5   10   15

Gln Arg Ile Gln Pro Gln Gln Val Ala Val Trp Pro Thr Met Val Asp
                20   25   30

Ile Asn Ser Pro Glu Ser Leu Thr Glu Ala Tyr Lys Leu Arg Ala Ala
            35   40   45

Arg Leu Val Glu Ile Ala Ala Lys Asn Leu Gln Lys Glu Val Ile His
     50   55   60

Arg Lys Ser Lys Glu Val Ala Trp Asn Leu Thr Ser Val Asp Leu Val
 65   70   75   80

Arg Ala Ser Glu Ala His Cys His Tyr Val Val Val Lys Leu Phe Ser
                85   90   95

Glu Lys Leu Leu Lys Ile Gln Asp Lys Ala Ile Gln Ala Val Leu Arg
                100   105   110

Ser Leu Cys Leu Leu Tyr Ser Leu Tyr Gly Ile Ser Gln Asn Ala Gly
            115   120   125

Asp Phe Leu Gln Gly Ser Ile Met Thr Glu Pro Gln Ile Thr Gln Val
     130   135   140

Asn Gln Arg Val Lys Glu Leu Leu Thr Leu Ile Arg Ser Asp Ala Val
145   150   155   160

Ala Leu Val Asp Ala Phe Asp Phe Gln Asp Val Thr Leu Gly Ser Val
                165   170   175

Leu Gly Arg Tyr Asp Gly Asn Val Tyr Glu Asn Leu Phe Glu Trp Ala
                180   185   190

Lys Asn Ser Pro Leu Asn Lys Ala Glu Val His Glu Ser Tyr Lys His
                195   200   205

Leu Lys Ser Leu Gln Ser Lys Leu
     210   215

<210> 1124
<211> 218
<212> PRT
<213> Homo sapiens

<400> 1124
Pro Ser Pro Arg Pro Pro Asp Pro Glu Ser Ser Gln Leu Arg Pro Gly
 1   .   5   10   15

Gly Asp Gly Ala Glu Leu Arg Val Leu Val Asp Met Asp Gly Val Leu
              20   25   30

Ala Asp Phe Glu Ala Gly Leu Leu Arg Gly Phe Arg Arg Arg Phe Pro
          35   40   45

Glu Glu Pro His Val Pro Leu Glu Gln Arg Arg Gly Phe Leu Ala Arg
      50   55   60

Glu Gln Tyr Arg Ala Leu Arg Pro Asp Leu Ala Asp Lys Val Ala Ser
 65·   70   75   80

Val Tyr Glu Ala Pro Gly Phe Phe Leu Asp Leu Glu Pro Ile Pro Gly
              85   90   95

Ala Leu Asp Ala Val Arg Glu Met Asn Asp Leu Pro Asp Thr Gln Val
          100   105   110

Phe Ile Cys Thr Ser Pro Leu Leu Lys Tyr His His Cys Val Gly Glu
          115   120   125

Lys Tyr Arg Trp Val Glu Gln His Leu Gly Pro Gln Phe Val Glu Arg
      130   135   140

Ile Ile Leu Thr Arg Asp Lys Thr Val Val Leu Gly Asp Leu Leu Ile
145   150   155   160

Asp Asp Lys Asp Thr Val Arg Gly Gln Glu Glu Thr Pro Ser Trp Glu
              165   170   175

His Ile Leu Phe Thr Cys Cys His Asn Arg His Leu Val Leu Pro Pro
              180   185   190

Thr Arg Arg Arg Leu Leu Ser Trp Ser Asp Asn Trp Arg Glu Ile Leu
          195   200   205

Asp Ser Lys Arg Gly Ala Ala Gln Arg Glu
      210   215

<210> 1125
<211> 87
<212> PRT
<213> Homo sapiens

<400> 1125

1128

Met Arg Arg Arg Val Phe Phe Leu His Arg Cys Ser Ile Leu Val Phe
 1   5   10   15

Leu Phe Pro Cys Lys Cys Asn Gln Met Pro Phe Tyr Met Trp Thr Tyr
             20   25   30

Leu Tyr Trp Pro Asn Ile Phe Phe Leu Leu Ser Leu Phe Phe Phe Pro
         35   40   45

Phe Phe Leu Leu Pro Leu Phe Leu Tyr Ser Phe Leu Phe Leu Phe Phe
     50   55   60

Phe Phe Phe Ser Phe Phe Phe Gly Ser Cys Cys Tyr Pro Arg His Phe
 65   70   75   80

Thr Ser Pro Ser Leu Lys Gly
                 85

<210> 1126
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (173)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1126
Pro Pro Leu Gly Lys Lys Xaa Glu Leu His Arg Gly Gly Gly Arg Ser
 1   5   10   15

Arg Leu Glu Glu Phe Gln Met Arg Ala Arg Pro Arg Pro Arg Pro Leu
             20   25   30

Trp Ala Thr Val Leu Ala Leu Gly Ala Leu Ala Gly Val Gly Val Gly
         35   40   45

Gly Pro Asn Ile Cys Thr Thr Arg Gly Val Ser Ser Cys Gln Gln Cys
     50   55   60

Leu Ala Val Ser Pro Met Cys Ala Trp Cys Ser Asp Glu Ala Leu Pro
 65   70   75   80

1129

```
Leu Gly Ser Pro Arg Cys Asp Leu Lys Glu Asn Leu Leu Lys Asp Asn
                85              90                  95

Cys Ala Pro Glu Ser Ile Glu Phe Pro Val Ser Glu Ala Arg Val Leu
            100             105                 110

Glu Asp Arg Pro Leu Ser Asp Lys Gly Ser Gly Asp Ser Ser Gln Val
        115             120                 125

Thr Gln Val Ser Pro Gln Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp
    130             135             140

Ser Lys Asn Phe Ser Ile Gln Val Arg Gln Val Glu Asp Tyr Pro Val
145             150             155             160

Asp Ile Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Xaa Gly
            165             170
```

```
<210> 1127
<211> 359
<212> PRT
<213> Homo sapiens

<400> 1127
Pro Gln Pro Phe Gln Gly Ser Gly Cys Val Ile Ala Ile Leu Gly Lys
  1           5               10                  15

Arg Cys Ser Arg Pro Trp Arg Thr Trp Arg Gly Arg Thr Pro Ser Thr
            20              25                  30

Arg His Ile Cys Ser Trp Cys Thr Met Val Ser Gly Thr Ser Ala Ala
        35              40                  45

Val Glu Glu Tyr Ser Cys Glu Phe Gly Ser Ala Lys Tyr Tyr Ala Leu
    50              55              60

Cys Gly Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val
65              70              75              80

Val Pro Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Lys
            85              90                  95

Tyr Lys Gly Ile Phe Asn Gly Phe Ser Val Thr Leu Lys Glu Asp Gly
            100             105                 110

Val Arg Gly Leu Ala Lys Gly Trp Ala Pro Thr Phe Leu Gly Tyr Ser
        115             120                 125

Met Gln Gly Leu Cys Lys Phe Gly Phe Tyr Glu Val Phe Lys Val Leu
```

```
                130                     135                     140

Tyr Ser Asn Met Leu Gly Glu Glu Asn Thr Tyr Leu Trp Arg Thr Ser
145                 150                 155                 160

Leu Tyr Leu Ala Ala Ser Ala Ser Ala Glu Phe Phe Ala Asp Ile Ala
                165                 170                 175

Leu Ala Pro Met Glu Ala Ala Lys Val Arg Ile Gln Thr Gln Pro Gly
            180                 185                 190

Tyr Ala Asn Thr Leu Arg Asp Ala Ala Pro Lys Met Tyr Lys Glu Glu
            195                 200                 205

Gly Leu Lys Ala Phe Tyr Lys Gly Val Ala Pro Leu Trp Met Arg Gln
    210                 215                 220

Ile Pro Tyr Thr Met Met Lys Phe Ala Cys Phe Glu Arg Thr Val Glu
225                 230                 235                 240

Ala Leu Tyr Lys Phe Val Val Pro Lys Pro Arg Ser Glu Cys Ser Lys
                245                 250                 255

Pro Glu Gln Leu Val Val Thr Phe Val Ala Gly Tyr Ile Ala Gly Val
            260                 265                 270

Phe Cys Ala Ile Val Ser His Pro Ala Asp Ser Val Val Ser Val Leu
        275                 280                 285

Asn Lys Glu Lys Gly Ser Ser Ala Ser Leu Val Leu Lys Arg Leu Gly
    290                 295                 300

Phe Lys Gly Val Trp Lys Gly Leu Phe Ala Arg Ile Ile Met Ile Gly
305                 310                 315                 320

Thr Leu Thr Ala Leu Gln Trp Phe Ile Tyr Asp Ser Val Lys Val Tyr
                325                 330                 335

Phe Arg Leu Pro Arg Pro Pro Pro Glu Met Pro Glu Ser Leu Lys
            340                 345                 350

Lys Lys Leu Gly Leu Thr Gln
        355
```

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<220>
<221> SITE
<222> (208)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (349)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1128
Leu Glu Pro Pro Ala Glu Pro Leu Gln Tyr Leu Ala Cys Tyr Arg Phe
 1               5                  10                  15

His Cys Ser His Gln Leu Gly Asp Asn Met Trp Phe Leu Thr Thr Leu
            20                  25                  30

Leu Leu Trp Val Pro Val Asp Gly Gln Val Asp Thr Thr Lys Ala Val
            35                  40                  45

Ile Thr Leu Gln Pro Pro Trp Val Ser Val Phe Gln Glu Glu Thr Val
        50                  55                  60

Thr Leu His Cys Glu Val Leu His Leu Pro Gly Ser Ser Ser Thr Gln
65                  70                  75                  80

Trp Phe Leu Asn Gly Thr Ala Thr Gln Thr Ser Thr Pro Ser Tyr Arg
                85                  90                  95

Ile Thr Ser Ala Ser Val Asn Asp Ser Gly Glu Tyr Arg Cys Gln Arg
            100                 105                 110

Gly Leu Ser Gly Arg Ser Asp Pro Ile Gln Leu Glu Ile His Arg Gly
            115                 120                 125

Trp Leu Leu Leu Gln Val Ser Ser Arg Val Phe Thr Glu Gly Glu Pro
    130                 135                 140

Leu Ala Leu Arg Cys His Ala Trp Lys Asp Lys Leu Val Tyr Asn Val
145                 150                 155                 160

Leu Tyr Tyr Arg Asn Gly Lys Ala Phe Lys Phe Phe His Trp Asn Ser
            165                 170                 175

Asn Leu Thr Ile Leu Lys Thr Asn Ile Ser His Asn Gly Thr Tyr His
            180                 185                 190

Cys Ser Gly Met Gly Lys His Arg Tyr Thr Ser Ala Gly Ile Ser Xaa
            195                 200                 205

Thr Val Lys Glu Leu Phe Pro Ala Pro Val Leu Asn Ala Ser Val Thr
```

```
            210                  215                  220

Ser Pro Leu Leu Glu Gly Asn Leu Val Thr Leu Ser Cys Glu Thr Lys
225                 230             235             240

Leu Leu Leu Gln Arg Pro Gly Leu Gln Leu Tyr Phe Ser Phe Tyr Met
                245             250             255

Gly Ser Lys Thr Leu Arg Gly Arg Asn Thr Ser Ser Glu Tyr Gln Ile
            260             265             270

Leu Thr Ala Arg Arg Glu Asp Ser Gly Leu Tyr Trp Cys Glu Ala Ala
        275             280             285

Thr Glu Asp Gly Asn Val Leu Lys Arg Ser Pro Glu Leu Glu Leu Gln
    290             295             300

Val Leu Gly Leu Gln Leu Pro Thr Pro Val Trp Phe His Val Leu Phe
305             310             315             320

Tyr Leu Ala Val Gly Ile Met Phe Leu Val Asn Thr Val Leu Trp Val
            325             330             335

Thr Ile Arg Lys Glu Leu Lys Arg Lys Lys Lys Trp Xaa Leu Glu Ile
        340             345             350

Ser Leu Asp Ser Gly His Glu Lys Lys Val Ile Ser Ser Leu Gln Glu
        355             360             365

Asp Arg His Leu Glu Glu Glu Leu Lys Cys Gln Glu Gln Lys Glu Glu
    370             375             380

Gln Leu Gln Glu Gly Val His Arg Lys Glu Pro Gln Gly Ala Thr
385             390             395
```

<210> 1129
<211> 147
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1129
Glu Ile Leu Phe Ile Phe Xaa Xaa Phe Phe Lys Gly Leu Ser Asn Ser
  1   5   10   15

Ala Ala Ala Met Ala Pro Val Lys Lys Leu Val Val Lys Gly Gly Lys
            20   25   30

Lys Lys Lys Gln Val Leu Lys Phe Thr Leu Asp Cys Thr His Pro Val
        35   40   45

Glu Asp Gly Ile Met Asp Ala Ala Asn Phe Glu Gln Phe Leu Gln Glu
    50   55   60

Arg Ile Lys Val Asn Gly Lys Ala Gly Asn Leu Gly Gly Gly Val Val
65   70   75   80

Thr Ile Glu Arg Ser Lys Ser Lys Ile Thr Val Thr Ser Glu Val Pro
            85   90   95

Phe Ser Lys Arg Tyr Leu Lys Tyr Leu Thr Lys Lys Tyr Leu Lys Lys
            100   105   110

Asn Asn Leu Arg Asp Trp Leu Arg Val Val Ala Asn Ser Lys Glu Ser
        115   120   125

Tyr Glu Leu Arg Tyr Phe Gln Ile Asn Gln Asp Glu Glu Glu Glu Glu
    130   135   140

Asp Glu Asp
145

<210> 1130
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1130
Asn Cys Ser Pro Ala Phe Tyr Gly Ser Ser Leu Pro Cys Pro Gln Thr
  1   5   10   15

Gln Gln Lys Arg Arg Gly Arg Ile Arg Gly Leu Ser Arg Pro Ala Pro
            20   25   30

Leu Pro Thr Cys His Thr Arg Cys Glu Phe Glu His Ser Pro Glu Met
        35   40   45

Glu Thr Ser His Pro Gln Leu Asn Asn Gly Pro Phe Met Pro Thr Leu
    50   55   60

```
Pro Thr Arg Arg Gly Gln Arg Cys Thr Arg Arg Pro Ser Ser Ser Pro
65              70          75              80

Ser Ser Ala Pro Ser His Tyr Ser Trp Phe Tyr
            85              90
```

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<210> 1131
<211> 510
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (352)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1131
Thr Ser Glu Glu Ser Arg Pro Arg Leu Ser Gln Leu Ser Val Thr Asp
 1           5               10              15

Val Thr Thr Ser Ser Leu Arg Leu Asn Trp Glu Ala Pro Pro Gly Ala
            20              25              30

Phe Asp Ser Phe Leu Leu Arg Phe Gly Val Pro Ser Pro Ser Thr Leu
        35              40              45

Glu Pro His Pro Arg Pro Leu Leu Gln Arg Glu Leu Met Val Pro Gly
    50              55              60

Thr Arg His Ser Ala Val Leu Arg Asp Leu Arg Ser Gly Thr Leu Tyr
65              70              75              80

Ser Leu Thr Leu Tyr Gly Leu Arg Gly Pro His Lys Ala Asp Ser Ile
            85              90              95

Gln Gly Thr Ala Arg Thr Leu Ser Pro Val Leu Glu Ser Pro Arg Asp
            100             105             110

Leu Gln Phe Ser Glu Ile Arg Glu Thr Ser Ala Lys Val Asn Trp Met
        115             120             125

Pro Pro Pro Ser Arg Ala Asp Ser Phe Lys Val Ser Tyr Gln Leu Ala
    130             135             140.
```

```
Asp Gly Gly Glu Pro Gln Ser Val Gln Val Asp Gly Gln Ala Arg Thr
145             150             155             160

Gln Lys Leu Gln Gly Leu Ile Pro Gly Ala Arg Tyr Glu Val Thr Val
                165             170             175

Val Ser Val Arg Gly Phe Glu Glu Ser Glu Pro Leu Thr Gly Phe Leu
            180             185             190

Thr Thr Val Pro Asp Gly Pro Thr Gln Leu Arg Ala Leu Asn Leu Thr
        195             200             205

Glu Gly Phe Ala Val Leu His Trp Lys Pro Pro Gln Asn Pro Val Asp
    210             215             220

Thr Tyr Asp Xaa Gln Val Thr Ala Pro Gly Ala Pro Pro Leu Gln Ala
225             230             235             240

Glu Thr Pro Gly Ser Ala Val Asp Tyr Pro Leu His Asp Leu Val Leu
            245             250             255

His Thr Asn Tyr Thr Ala Thr Val Arg Gly Leu Arg Gly Pro Asn Leu
        260             265             270

Thr Ser Pro Ala Ser Ile Thr Phe Thr Thr Gly Leu Glu Ala Pro Arg
        275             280             285

Asp Leu Glu Ala Lys Glu Val Thr Pro Arg Thr Ala Leu Leu Thr Trp
    290             295             300

Thr Glu Pro Pro Val Arg Pro Ala Gly Tyr Leu Leu Ser Phe His Thr
305             310             315             320

Pro Gly Gly Gln Thr Gln Glu Ile Leu Leu Pro Gly Gly Ile Thr Ser
            325             330             335

His Gln Leu Leu Gly Leu Phe Pro Ser Thr Ser Tyr Asn Ala Arg Xaa
        340             345             350

Gln Ala Met Trp Gly Gln Ser Leu Leu Pro Pro Val Ser Thr Ser Phe
        355             360             365

Thr Thr Gly Gly Leu Arg Ile Pro Phe Pro Arg Asp Cys Gly Glu Glu
    370             375             380

Met Gln Asn Gly Ala Gly Ala Ser Arg Thr Ser Thr Ile Phe Leu Asn
385             390             395             400

Gly Asn Arg Glu Arg Pro Leu Asn Val Phe Cys Asp Met Glu Thr Asp
            405             410             415
```

```
Gly Gly Gly Trp Leu Val Phe Gln Arg Arg Met Asp Gly Gln Thr Asp
            420             425             430

Phe Trp Arg Asp Trp Glu Asp Tyr Ala His Gly Phe Gly Asn Ile Ser
        435             440             445

Gly Glu Phe Trp Leu Gly Asn Glu Ala Leu His Ser Leu Thr Gln Ala
    450             455             460

Gly Asp Tyr Ser Met Arg Val Asp Leu Arg Ala Gly Asp Glu Ala Val
465             470             475             480

Phe Ala Gln Tyr Asp Ser Phe His Val Asp Ser Ala Ala Glu Tyr Tyr
            485             490             495

Arg Leu His Leu Glu Gly Tyr His Gly Thr Ala Gly Thr Pro
        500             505             510
```

<210> 1132
<211> 430
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (182)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (408)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (410)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (414)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (420)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (428)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1132
Arg Thr Ala Asp Gln Thr Val Thr Ala Ala Leu Thr Lys Arg Ser Trp
 1               5                  10                  15


Asn Ser Ser Ser Ser Pro Gln Arg Arg Thr Glu Gln Thr Ala Glu Thr
            20                  25                  30


Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln
        35                  40                  45


Arg Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
    50                  55                  60


Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly
 65                  70                  75                  80


Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly
            85                  90                  95


Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile
            100                 105                 110


Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser
            115                 120                 125


Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile
    130                 135                 140


Ile Gln Asn Asp Thr Gly Phe Tyr Thr Leu His Val Ile Lys Ser Asp
145                 150                 155                 160


Leu Val Asn Glu Glu Ala Thr Gly Gln Phe Arg Val Tyr Pro Glu Leu
            165                 170                 175


Pro Lys Pro Ser Ile Xaa Ser Asn Asn Ser Lys Pro Val Glu Asp Lys
            180                 185                 190


Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Ala Thr Tyr
            195                 200                 205


Leu Trp Trp Val Asn Asn Gln Xaa Leu Pro Val Ser Pro Arg Leu Gln
```

1138

```
                  210                215                220

        Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn
        225                230                235                240

        Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg
                        245                250                255

        Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro
                        260                265                270

        Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn
                        275                280                285

        Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe
                290                295                300

        Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn
        305                310                315                320

        Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser
                        325                330                335

        Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala
                        340                345                350

        Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu
                        355                360                365

        Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr
                370                375                380

        Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg
        385                390                395                400

        Leu His Leu Pro Met Thr Thr Xaa Pro Xaa Leu Tyr Ser Xaa Ala Gln
                        405                410                415

        Gly Met Met Xaa Asp Pro Met Asn Val Glu Ser Xaa Thr Asn
                        420                425                430
```

```
<210> 1133
<211> 737
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (308)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (534)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (535)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1133
Xaa His Ala Ser Ala Ala Xaa Pro Thr Val Thr Ala Ala Leu Thr Arg
 1   5   10   15

Ala Phe Leu Glu Leu Lys Leu Ser Thr Lys Arg Trp Thr Glu Lys Thr
            20   25   30

Ala Glu Thr Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val
        35   40   45

Pro Trp Lys Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn
    50   55   60

Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val

1140

```
        65                  70                  75                  80

    Ala Glu Gly Lys Glu Val Leu Leu Leu Ala His Asn Leu Pro Gln Asn
                    85                  90                  95

    Arg Ile Gly Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Ser
                   100                 105                 110

    Leu Ile Val Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro
                   115                 120                 125

    Ala Tyr Ser Gly Arg Glu Thr Ile Tyr Pro Asn Xaa Ser Leu Leu Ile
               130                 135                 140

    Gln Asn Val Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile
    145                 150                 155                 160

    Lys Ser Asp Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr
                   165                 170                 175

    Pro Glu Leu Pro Lys Pro Ser Ile Ser Xaa Asn Asn Ser Asn Pro Val
                   180                 185                 190

    Glu Xaa Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Val Gln Asn
               195                 200                 205

    Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro
        210                 215                 220

    Arg Leu Gln Leu Ser Asn Gly Asn Met Thr Leu Thr Leu Leu Ser Val
    225                 230                 235                 240

    Lys Arg Asn Asp Ala Gly Ser Tyr Glu Cys Glu Ile Gln Asn Pro Ala
                   245                 250                 255

    Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asn Val Leu Tyr Gly Pro
                   260                 265                 270

    Asp Gly Pro Thr Ile Ser Pro Ser Lys Ala Asn Tyr Arg Pro Gly Glu
               275                 280                 285

    Asn Leu Asn Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr
        290                 295                 300

    Ser Trp Phe Xaa Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe
    305                 310                 315                 320

    Ile Pro Asn Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala
                   325                 330                 335

    His Asn Ser Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr
```

1141

```
                 340                    345                    350

     Val Tyr Ala Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn
             355                 360                 365

     Pro Val Glu Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile
             370                 375                 380

     Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val
     385                 390                 395                 400

     Ser Pro Arg Leu Gln Leu Ser Asn Asp Asn Arg Thr Leu Thr Leu Leu
                     405                 410                 415

     Ser Val Thr Arg Asn Asp Val Gly Pro Tyr Glu Cys Gly Ile Gln Asn
                 420                 425                 430

     Glu Leu Ser Val Asp His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr
             435                 440                 445

     Gly Pro Asp Asp Pro Thr Ile Ser Pro Ser Tyr Thr Tyr Tyr Arg Pro
         450                 455                 460

     Gly Val Asn Leu Ser Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala
     465                 470                 475                 480

     Gln Tyr Ser Trp Leu Ile Asp Gly Asn Ile Gln Gln His Thr Gln Glu
                     485                 490                 495

     Leu Phe Ile Ser Asn Ile Thr Glu Lys Asn Ser Gly Leu Tyr Thr Cys
                 500                 505                 510

     Gln Ala Asn Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val Lys Thr
                 515                 520                 525

     Ile Thr Val Ser Ala Xaa Xaa Pro Lys Pro Ser Ile Ser Ser Asn Asn
         530                 535                 540

     Ser Lys Pro Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro
     545                 550                 555                 560

     Glu Ala Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu
                 565                 570                 575

     Pro Val Ser Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr Leu Thr
             580                 585                 590

     Leu Phe Asn Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys Gly Ile
             595                 600                 605

     Gln Asn Ser Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asp Val
```

```
        610                  615                  620

Leu Tyr Gly Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr
625             630             635             640

Leu Ser Gly Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro
            645             650             655

Ser Pro Gln Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr
            660             665             670

Gln Val Leu Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr
            675             680             685

Ala Cys Phe Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val
        690             695             700

Lys Ser Ile Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala
705             710             715             720

Gly Ala Thr Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu
            725             730             735

Ile
```

<210> 1134
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1134
```
Phe Gly Thr Xaa Arg Ser Val Val Leu Leu Leu Val Ala Val Arg Leu
  1             5             10             15

His Thr Leu Leu Ser Cys Pro Leu Glu Gln Pro Ala Gly Thr Glu Trp
            20             25             30

Ile Leu Glu Glu Gly Val Thr Thr Gly Pro Pro Arg Lys Pro Arg Ala
            35             40             45

Asp Ile Tyr Asn Leu Arg Ser Pro Asp Glu Phe Ile Val Gly Gln Asn
        50             55             60
```

1143

Gln Ala Leu Ile Glu Pro Gly
65   70

<210> 1135
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1135
Gly Leu Arg Arg Leu Asp Ser Ala Ser Gly Thr Val Tyr Thr Ala Met
 1   5   10   15

Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys Gln Met Asn Leu Gln
            20   25   30

Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Arg
        35   40   45

Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu Asp Ser Tyr Leu Val
    50   55   60

Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu Ala Gly Gly Ser Leu
65   70   75   80

Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu Gly Gln Ile Ala Ala
            85   90   95

Val Cys Arg Glu Xaa Leu Gln Ala Leu Glu Phe Leu His Ser Asn Gln
        100   105   110

Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr
        115   120   125

Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro Lys Val
    130   135   140

Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu Gly Glu
145   150   155   160

Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala
            165   170   175

Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser Ala Ile
            180   185   190

```
Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg
     195                 200             205

Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys
     210             215             220

Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Ala Lys Glu Ala Thr
225             230             235             240

Lys Asn Asn His
```

```
<210> 1136
<211> 166
<212> PRT
<213> Homo sapiens

<400> 1136
Arg Ala Glu Phe Gly Thr Ser Pro Arg Ala Arg Arg His Glu Cys Cys
  1             5             10             15

Arg Phe Leu Asp Asp Asn Gln Ile Ile Thr Ser Ser Gly Asp Thr Thr
             20             25             30

Cys Ala Leu Trp Asp Ile Glu Thr Gly Gln Gln Thr Val Gly Phe Ala
     35             40             45

Gly His Ser Gly Asp Val Met Ser Leu Ser Leu Ala Pro Asp Gly Arg
     50             55             60

Thr Phe Val Ser Gly Ala Cys Asp Ala Ser Ile Lys Leu Trp Asp Val
 65             70             75             80

Arg Asp Ser Met Cys Arg Gln Thr Phe Ile Gly His Glu Ser Asp Ile
             85             90             95

Asn Ala Val Ala Phe Phe Pro Asn Gly Tyr Ala Phe Thr Thr Gly Ser
             100             105             110

Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu
     115             120             125

Leu Met Tyr Ser His Asp Asn Ile Ile Cys Gly Ile Thr Ser Val Ala
     130             135             140

Phe Ser Arg Ser Asp Gly Cys Cys Ser Leu Ala Thr Thr Thr Ser Thr
145             150             155             160
```

1145

Ala Thr Ser Gly Met Pro
                165

<210> 1137
<211> 79
<212> PRT
<213> Homo sapiens

<400> 1137
Thr Asn Asn Lys Ser Leu Val Gln Leu Lys His Ile Ser Asn Asp Phe
 1   5   10   15

Ser Lys Phe Lys Val Asp His Asp Arg Ile Ile Lys Asp Arg Lys Asp
               20   25   30

Leu Ser Asn Leu Val Met Thr Ile Ile Ser Ile Phe Ala Glu Leu Lys
           35   40   45

Ile Phe Asn Phe Ile Asn Met Leu Leu Gln Leu Pro Asp Leu Lys Lys
       50   55   60

Lys Ser Phe Pro His Ser Gln Leu Lys Val Arg Thr Leu His Phe
 65   70   75

<210> 1138
<211> 397
<212> PRT
<213> Homo sapiens

<400> 1138
Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val
 1   5   10   15

Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu
               20   25   30

Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu
           35   40   45

Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile
       50   55   60

Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro
 65   70   75   80

Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser Gly Lys Gly Thr
               85   90   95

```
Thr Leu Arg Gly Arg Ser Asp Ala Asp Leu Val Val Phe Leu Ser Pro
            100             105             110

Leu Thr Thr Phe Gln Asp Gln Leu Asn Arg Arg Gly Glu Phe Ile Gln
            115             120             125

Glu Ile Arg Arg Gln Leu Glu Ala Cys Gln Arg Glu Arg Ala Phe Ser
        130             135             140

Val Lys Phe Glu Val Gln Ala Pro Arg Trp Gly Asn Pro Arg Ala Leu
    145             150             155             160

Ser Phe Val Leu Ser Ser Leu Gln Leu Gly Glu Gly Val Glu Phe Asp
                165             170             175

Val Leu Pro Ala Phe Asp Ala Leu Asp Phe Ala Arg Thr Gly Gln Leu
            180             185             190

Thr Gly Gly Tyr Lys Pro Asn Pro Gln Ile Tyr Val Lys Leu Ile Glu
            195             200             205

Glu Cys Thr Asp Leu Gln Lys Glu Gly Glu Phe Ser Thr Cys Phe Thr
    210             215             220

Glu Leu Gln Arg Asp Phe Leu Lys Gln Arg Pro Thr Lys Leu Lys Ser
225             230             235             240

Leu Ile Arg Leu Val Lys His Trp Tyr Gln Asn Cys Lys Lys Lys Leu
                245             250             255

Gly Lys Leu Pro Pro Gln Tyr Ala Leu Glu Leu Leu Thr Val Tyr Ala
                260             265             270

Trp Glu Arg Gly Ser Met Lys Thr His Phe Asn Thr Ala Gln Gly Phe
            275             280             285

Arg Thr Val Leu Glu Leu Val Ile Asn Tyr Gln Gln Leu Cys Ile Tyr
    290             295             300

Trp Thr Lys Tyr Tyr Asp Phe Lys Asn Pro Ile Ile Glu Lys Tyr Leu
305             310             315             320

Arg Arg Gln Leu Thr Lys Pro Arg Pro Val Ile Leu Asp Pro Ala Asp
                325             330             335

Pro Thr Gly Asn Leu Gly Gly Gly Asp Pro Lys Gly Trp Arg Gln Leu
                340             345             350

Ala Gln Glu Ala Glu Ala Trp Leu Asn Tyr Pro Cys Phe Lys Asn Trp
                355             360             365
```

```
Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala
    370             375             380

Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala
385             390             395
```

<210> 1139
<211> 180
<212> PRT
<213> Homo sapiens

<400> 1139

```
Phe Leu Leu Ser Asn Ala Arg Trp Ser Asn Arg Pro Asp Thr Ala Thr
  1             5               10              15

Ala Leu Ala Gly Gly Ala Val Met Pro Glu Leu Ile Leu Ser Pro Ala
            20              25              30

Thr Ala Pro His Pro Leu Lys Met Phe Ala Cys Ser Lys Phe Val Ser
        35              40              45

Thr Pro Ser Leu Val Lys Ser Thr Ser Gln Leu Leu Ser Arg Pro Leu
    50              55              60

Ser Ala Val Val Leu Lys Arg Pro Glu Ile Leu Thr Asp Glu Ser Leu
65              70              75              80

Ser Ser Leu Ala Val Ser Cys Pro Leu Thr Ser Leu Val Ser Ser Arg
            85              90              95

Ser Phe Gln Thr Ser Ala Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys
            100             105             110

Phe Ile Gly Ala Gly Ala Ala Thr Val Gly Val Ala Gly Ser Gly Ala
        115             120             125

Gly Ile Gly Thr Val Phe Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn
    130             135             140

Pro Ser Leu Lys Gln Gln Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala
145             150             155             160

Leu Ser Glu Ala Met Gly Leu Phe Cys Leu Met Val Ala Phe Leu Ile
            165             170             175

Leu Phe Ala Met
            180
```

```
<210> 1140
<211> 484
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1140
Trp Leu Leu Arg Ser Pro Gly Lys Leu Thr Ala Arg Glu Arg Ile Ser
 1               5                   10                  15


Leu Leu Leu Asp Pro Gly Ser Phe Xaa Glu Ser Asp Met Phe Val Glu
                20                  25                  30


His Arg Cys Ala Asp Phe Gly Met Ala Ala Asp Lys Asn Lys Phe Pro
            35                  40                  45


Gly Asp Ser Val Val Thr Gly Arg Gly Arg Ile Asn Gly Arg Leu Val
        50                  55                  60


Tyr Val Phe Ser Gln Asp Phe Thr Val Phe Gly Gly Ser Leu Ser Gly
65                  70                  75                  80


Ala His Ala Gln Lys Ile Cys Lys Ile Met Asp Gln Ala Ile Thr Val
                85                  90                  95


Gly Ala Pro Val Ile Gly Leu Asn Asp Ser Gly Gly Ala Arg Ile Gln
            100                 105                 110


Glu Gly Val Glu Ser Leu Ala Gly Tyr Ala Asp Ile Phe Leu Arg Asn
            115                 120                 125


Val Thr Ala Ser Gly Val Ile Pro Gln Ile Ser Leu Ile Met Gly Pro
    130                 135                 140


Cys Ala Gly Gly Ala Val Tyr Ser Pro Ala Leu Thr Asp Phe Thr Phe
145                 150                 155                 160


Met Val Lys Asp Thr Ser Tyr Leu Phe Ile Thr Gly Pro Asp Val Val
                165                 170                 175


Lys Ser Val Thr Asn Glu Asp Val Thr Gln Glu Glu Leu Gly Gly Ala
            180                 185                 190


Lys Thr His Thr Thr Met Ser Gly Val Ala His Arg Ala Phe Glu Asn
            195                 200                 205
```

```
Asp Val Asp Ala Leu Cys Asn Leu Arg Asp Phe Phe Asn Tyr Leu Pro
    210             215             220

Leu Ser Ser Gln Asp Pro Ala Pro Val Arg Glu Cys His Asp Pro Ser
225             230             235             240

Asp Arg Leu Val Pro Glu Leu Asp Thr Ile Val Pro Leu Glu Ser Thr
            245             250             255

Lys Ala Tyr Asn Met Val Asp Ile Ile His Ser Val Val Asp Glu Arg
            260             265             270

Glu Phe Phe Glu Ile Met Pro Asn Tyr Ala Lys Asn Ile Ile Val Gly
        275             280             285

Phe Ala Arg Met Asn Gly Arg Thr Val Gly Ile Val Gly Asn Gln Pro
    290             295             300

Lys Val Ala Ser Gly Cys Leu Asp Ile Asn Ser Ser Val Lys Gly Ala
305             310             315             320

Arg Phe Val Arg Phe Cys Asp Ala Phe Asn Ile Pro Leu Ile Thr Phe
            325             330             335

Val Asp Val Pro Gly Phe Leu Pro Gly Thr Ala Gln Glu Tyr Gly Gly
            340             345             350

Ile Ile Arg His Gly Ala Lys Leu Leu Tyr Ala Phe Ala Glu Ala Thr
        355             360             365

Val Pro Lys Val Thr Val Ile Thr Arg Lys Ala Tyr Gly Gly Ala Tyr
    370             375             380

Asp Val Met Ser Ser Lys His Leu Cys Gly Asp Thr Asn Tyr Ala Trp
385             390             395             400

Pro Thr Ala Glu Ile Ala Val Met Gly Ala Lys Gly Ala Val Glu Ile
            405             410             415

Ile Phe Lys Gly His Glu Asn Val Glu Ala Ala Gln Ala Glu Tyr Ile
            420             425             430

Glu Lys Phe Ala Asn Pro Phe Pro Ala Ala Val Arg Gly Phe Val Asp
        435             440             445

Asp Ile Ile Gln Pro Ser Ser Thr Arg Ala Arg Ile Cys Cys Asp Leu
    450             455             460

Asp Val Leu Ala Ser Lys Lys Val Gln Arg Pro Trp Arg Lys His Ala
465             470             475             480
```

Asn Ile Pro Leu

<210> 1141
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<400> 1141
Leu Xaa Glu Leu Glu Arg Tyr Val Thr Ser Cys Leu Arg Lys Lys Arg
 1   5   10   15

Lys Pro Gln Ala Glu Lys Val Asp Val Ile Ala Gly Ser Ser Lys Met
            20   25   30

Lys Gly Phe Ser Ser Ser Glu Ser Glu Ser Ser Ser Glu Ser Ser Ser
        35   40   45

Ser Asp Ser Glu Xaa Xaa Glu Thr Gly Pro Ala
    50   55

<210> 1142
<211> 199
<212> PRT
<213> Homo sapiens

<400> 1142
Ser Gly Tyr Lys Thr Ile Ser Ala Met Gln Thr Ile Lys Cys Val Val
  1   5   10   15

Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu Leu Ile Ser Tyr Thr

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                    20                    25                    30

    Thr Asn Lys Phe Pro Ser Glu Tyr Val Pro Thr Val Phe Asp Asn Tyr
            35                    40                    45

    Ala Val Thr Val Met Ile Gly Gly Glu Pro Tyr Thr Leu Gly Leu Phe
            50                    55                    60

    Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr
    65                    70                    75                    80

    Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Val Ser Pro Ser
                        85                    90                    95

    Ser Phe Glu Asn Val Lys Glu Lys Trp Val Pro Glu Ile Thr His His
                100                   105                   110

    Cys Pro Lys Thr Pro Phe Leu Leu Val Gly Thr Gln Ile Asp Leu Arg
                115                   120                   125

    Asp Asp Pro Ser Thr Ile Glu Lys Leu Ala Lys Asn Lys Gln Lys Pro
        130                   135                   140

    Ile Thr Pro Glu Thr Ala Glu Lys Leu Ala Arg Asp Leu Lys Ala Val
    145                   150                   155                   160

    Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Asn Val
                    165                   170                   175

    Phe Asp Glu Ala Ile Leu Ala Ala Leu Glu Pro Pro Glu Pro Lys Lys
                180                   185                   190

    Ser Arg Arg Cys Val Leu Leu
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<210> 1143
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1143

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    Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu Ile Ser Thr Leu
    1                   5                     10                    15

    Ala Lys Met Tyr Glu Lys Ile Leu Lys Leu Thr Ala Asp Ala Lys Phe
                    20                    25                    30

    Glu Ser Gly Asp Val Lys Ala Thr Val Ala Val Leu Ser Phe Ile Leu
                35                    40                    45
```

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Ser Ser Ala Ala Lys His Ser Val Asp Gly Glu Ser Leu Ser Ser Glu
    50              55              60

Leu Gln Gln Leu Gly Leu Pro Lys Glu His Ala Ala Ser Leu Cys Arg
65              70              75                      80

Cys Tyr Glu Glu Lys Gln Ser Pro Leu Gln Lys His Leu Arg Val Cys
                85              90                      95

Ser Leu Arg Met Asn Arg Leu Ala Gly Val Gly Trp Arg Val Asp Tyr
            100             105             110

Thr Leu Ser Ser Ser Leu Leu Gln Ser Val Glu Glu Pro Met Val His
            115             120             125

Leu Arg Leu Glu Val Ala Ala Ala Pro Gly Thr Pro Ala Gln Pro Val
    130             135             140

Ala Met Ser Leu Ser Ala Asp Lys Phe Gln Val Leu Leu Ala Glu Leu
145             150             155             160

Lys Gln Ala Gln Thr Leu Met Ser Ser Leu Gly
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<210> 1144
<211> 151
<212> PRT
<213> Homo sapiens

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<400> 1144
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Gln Trp Arg Gln Gly Val Gln Gly Arg Ser Ala Ser Gly Thr Ser Thr
    1           5               10              15
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